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FROM: Clinton Page, Ed.S., Chief Accountability Officer

Terri Mozingo, Ed.D., Chief Academic Officer

THROUGH: Alvin L. Crawley, Ed.D., Superintendent of Schools

TO: The Honorable Karen Graf, Chair, and Members of the Alexandria

City School Board

TOPIC: Curriculum Audit Report

BACKGROUND:

In the fall of 2009 the Alexandria City Public Schools (ACPS) began a major initiative targeted towards creating a local curriculum focused on preparing ACPS students to meet and exceed what was termed "21st Century Skills." The new curriculum, once developed, would replace locally created SOL pacing guides which outlined for schools when they were to teach specific SOLs during the course of the school year. Special focus was placed on preparing a curriculum that would not just prepare students in the core subjects but to also focus on learning and innovation skills; information, media, and technology skills; and life and career skills deemed necessary for success in the 21st century. Significant resources were allocated and realigned at the division level to allow for a local curriculum to be created and implemented across all schools within the ACPS. A phased approach was developed for the release of the newly developed curriculum over the course of several years. At the beginning of the 2011-2012 school year this work came to fruition when the new ACPS curriculum was rolled out division wide. In the years that followed, revisions were made as well as additional materials added based on staff feedback and to continue to support the work of schools. Based on the critical nature of this work in driving student outcomes, resources allocated, and time of implementation, the Superintendent of Schools, along with senior staff, identified the need for a formal evaluation of the curriculum in the fall of 2014.

Evaluation

Evaluation work began in May 2015 in collaboration with a competitively selected external evaluator, McREL International, and was guided by the following key research questions:

- 1. Extent of alignment between the written curriculum and VA SOLs (Task 1)
- 2. Extent of alignment between the written curriculum and the tested curriculum (Task 2)
- 3. Extent of alignment between written curriculum and taught curriculum (Task 3)

- 4. Extent to which the needs of special populations are met in the classroom (Task 4)
- 5. Extent to which ACPS classrooms are rigorous and engaging (Task 5)
- 6. Extent to which the supported curriculum (professional development, time, and materials) meets the needs of district and school staff to improve student learning (Task 6)

These research questions were thoroughly examined over the course of the next 16 months through reviews of the ACPS written curriculum, in-depth interviews of Curriculum & Instruction staff, focus groups with staff and students, surveys of parents and staff, and classroom observations. All data collected were then analyzed, synthesized across sources and research questions, and ultimately incorporated into a comprehensive report. The report, attached to this memorandum, contains overall commendations and recommendations found in the Executive Summary, as well as specific commendations, recommendations, findings, and discussion for key each research question embedded into unique chapters within the full report.

RECOMMENDATION:

The Superintendent recommends the Board review the Curriculum Audit Report for future discussion regarding possible planning, programmatic, and/or budgetary changes.

IMPACT:

The Curriculum Audit Report provides ACPS with critical insights into areas of the ACPS curriculum that are functioning at high levels as well as those areas that present opportunities for further improvements. This information will be utilized by the division to create a targeted and specific plan that will lay out the road ahead, with key milestones and deliverables identified, to address all areas identified within the report as ACPS continues to strive towards the mission of every student succeeds.

ATTACHMENTS: (1) Curriculum Audit Report PowerPoint

(2) Curriculum Audit Report

CONTACT PERSON:

Clinton Page, Chief Accountability Officer





Alexandria City Public Schools: Curriculum Audit Final Report

Submitted by:

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About McREL

McREL International is a nonprofit education and research organization based in Denver, Colorado, with offices in Charleston, West Virginia, and Honolulu, Hawai'i. McREL has more than 50 years of experience conducting research and providing evaluation services; developing resources and tools; and providing technical assistance, professional development, and consultation in systems improvement, the standards development, assessment, strategic planning, out-of-school-time learning, and leadership development. McREL's client list includes federal, regional, and state agencies; schools and districts; institutions of higher education; foundations; private organizations; and international entities.

McREL operates two large U.S. Department of Education-funded programs: Regional Educational Laboratory Pacific (REL Pacific), and the North Central Comprehensive Center (NCCC). REL Pacific is part of a network of 10 laboratories that helps states, entities, divisions, and schools make the best use of their data systems; conducts high-quality research and evaluation; provides opportunities for practitioners to learn about the best education research; and helps education policymakers and practitioners incorporate data-based practices into regular decision making. The NCCC, which serves the states of Nebraska, North Dakota, South Dakota, and Wyoming, provides a range of services including technical assistance and professional development to build state capacity to better serve its schools and districts in meeting the needs of students through sustained support.

Our website (www.mcrel.org) includes reports, resources, products, and services designed to improve school and student performance. If you have a question about McREL, contact us at 303.337.0990 or info@mcrel.org.



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EXECUTIVE SUMMARY

According to research, providing a guaranteed and viable curriculum has the greatest impact on improving student learning and achievement of any school-level factor (Marzano, 2003). A guaranteed curriculum is often described as a mechanism through which all students have an equal opportunity (time and access) to learn rigorous content. A high-quality, division-developed written curriculum clearly articulates expectations for student learning, provides aligned assessments, and offers instructional guidance.

In order for a curriculum to be viable, there must be adequate time for teachers to teach the content and for students to learn the content. A viable curriculum includes only essential knowledge and skills, eliminating content that is not required for students to progress to the next learning level. A viable curriculum requires realistic pacing across the school year for student learning of new academic content.

Conducting a curriculum audit allows a school division to assess whether the essential content is articulated (guaranteed) and whether relevant resources and assessments are aligned. It also provides insights into how the written curriculum is implemented and whether stakeholders perceive the curriculum as viable. Additionally, audit data can help division leaders better understand the strengths of the curriculum and areas for improvement. The findings of this audit provide Alexandria City Public Schools (ACPS) with evidence on which to base next-step actions aimed at helping teachers and administrators deliver essential academic content and meet the learning needs of all ACPS students.

Audit Phases

The audit of the ACPS written, tested, taught, and supported curriculum began in May 2015 and was conducted in two phases. Phase I was designed to address the written and tested ACPS curriculum and included the tasks below:

- I. Conduct interviews with ACPS curriculum developers to gather information on the curriculum development and implementation process,
- 2. Determine the extent of alignment between the written curriculum and the Virginia Standards of Learning (Task I), and
- 3. Determine the extent of alignment between the written curriculum and the tested curriculum Transfer Tasks (Task 2).

Five interviews were conducted and a report documenting the interview process and findings was submitted to ACPS in June 2015 (see Chapter 2). Curriculum documents in English language arts (ELA), mathematics, science, and social science/history were analyzed for selected elementary, middle school, and high school courses. Sixteen individual reports detailing the findings were submitted to ACPS in August 2015. A summary of these findings can be found in Chapters 3 and 4 of this report.

Phase 2 of the curriculum audit began in December 2015. McREL designed Phase 2 to address questions associated with the taught curriculum and the supported curriculum. The taught curriculum provides insights into how the written and tested curricula are implemented in ACPS classrooms, and the supported curriculum entails the systems that support implementation of the curriculum such as professional development. Phase 2 of the audit included the following tasks:

1. Determine the extent of alignment between the written curriculum and the taught curriculum (Task 3),

- 2. Determine the extent to which the needs of special student populations are met in the classroom (Task 4),
- 3. Determine the extent to which ACPS classrooms are rigorous and engaging (Task 5), and
- 4. Determine the extent to which the supported curriculum (professional development, time, and materials) meets the needs of division and school staff to improve student learning (Task 6).

During Phase 2, data were collected in the form of division written documents, classroom observations, focus groups, and surveys. Details of these findings can be found in Chapters 5 through 8.

The purpose of this Executive Summary is to cite overall commendations and highlight the major themes that emerged during the curriculum audit. Major themes include discussion of the written curriculum documents, Transfer Tasks, support for diverse learners, and division support for curriculum implementation. Within these sections, considerations for next steps are offered. Detailed reports by task with specific commendations and recommendations are provided in the subsequent chapters of this final report.

Overall Commendations

- I. The curriculum guides use a common framework for all education levels (elementary, middle school, high school) and all content areas. This is especially helpful to teachers who teach multiple grade levels, content areas, and/or courses.
- 2. The curriculum guides facilitate a variety of diverse learning experiences, including group work, individual work, and project-based learning.
- 3. Useful literary recommendations provide opportunities to link lessons across different content areas in the curriculum guide.
- 4. The division resources for differentiating instruction and executive function provide helpful instructional ideas for how to meet the needs of a variety of learners and for encouraging self-regulation and self-direction in the classroom.
- 5. Teachers report that the greatest strengths of the curriculum guide include the integration of technology, essential questions to guide instruction, and key vocabulary for lesson development.

Highlighted Themes

Written curriculum documents

The primary documents in the ACPS written curriculum are the curriculum guides, which are provided for specific grades and courses (see Appendix A) and include links to the Transfer Tasks and other support materials.

Although analysis of the curriculum guides revealed multiple strengths, ACPS teachers indicated limited use of these guides for lesson planning and instruction. Data indicate less than half of ACPS teachers responding to the audit survey regularly use the guides for lesson planning. These data were reinforced by focus group participants who indicated that the PDF format is cumbersome as users must scroll through the document rather than perform targeted searches. Participating teachers also indicated hyperlinks to resources are often broken, which increases teacher frustration and results in decreased use. As concern about usability is a recurring theme, ACPS should consider strategies to increase usability of the written curriculum, and audit data suggest the three following possible strategies.

1. Replace the current online PDF format with a web-based searchable platform for housing the written curriculum. Interviews with curriculum developers suggested that such

- a platform would provide greater flexibility for users, allowing teachers to more easily navigate the guide and search for specific resources.
- 2. Provide instructional guidance for lesson planning that is specific to the individual unit's subject matter content. McREL analysts noted certain components of the written curriculum guides (e.g., formative assessment guidance, resources for special student populations) are repeated verbatim from unit to unit across guides. Although this text describes important aspects of good instruction, it is not specific to the unit's content and adds length and complexity to the guides, which reduces usability and value. To reduce this repetition, consider providing general instructional guidance in one location within the curriculum guide and ensure that instructional guidance within each unit specific to that unit's content.
- 3. Include ACPS teachers more directly in the development of curriculum lessons. Focus group participants indicated a willingness to be more directly involved in the curriculum development process. Teachers and administrators both noted a disconnect between recommended lesson resources in the curriculum guides and practical application of these lessons during instruction. McREL content analysts also suggested ACPS consider a process for gathering and vetting teacher-developed lessons so that locally developed lessons might be included in the curriculum guides. This process could provide lesson resources that better reflect local context and might increase teachers' feelings of ownership and commitment to the curriculum.

Embedded assessments: Transfer Tasks

The ACPS written curriculum, *Stage Two*, Assessment Evidence, describes the division-created assessments known as Transfer Tasks, which are developed for each unit of instruction. The Transfer Tasks typically employ a real-world context that can engage learners as well as promote cross-cutting critical thinking skills. Additionally, most instructional units include tasks at three levels of complexity so that teachers may administer the task that is most appropriate for individual learners in their classroom.

Curriculum development principles suggest the current design of Transfer Tasks should provide meaningful tools to assess student progress, but ACPS teachers call into question the usefulness of the data derived from these assessments. In fact, data from teacher focus groups indicate that re-evaluating both the functionality and relevance of the Transfer Tasks is a high priority. To increase usability of the Transfer Tasks and resulting data, consider the following strategies.

- I. Identify the VA Standard(s) of Learning (SOLs) that is/are aligned with the Transfer Task. When conducting the alignment study between the Transfer Tasks and the associated content in the curriculum guide, McREL analysts noted some suggested activities did not identify the associated VA SOLs and that evaluation rubrics were not aligned with VA SOLs. These missing elements make it more difficult to determine the connection between the VA SOLs, the essential unit content, and the Transfer Task, calling into question the usefulness of assessment data.
- 2. Provide guidance on how to accommodate the needs of students with disabilities (SWD) when administering Transfer Tasks. Although guidance is provided for students who are English-language learners (ELL) and for students identified as talented and gifted (TAG), the curriculum guides provide no guidance regarding how to accommodate pre-assessment and diagnosis, formative assessment, or Transfer Tasks for SWD. Providing such guidance would help teachers determine the appropriate task for SWD and offer suggestions for accommodations.
- 3. **Provide professional development on how to use data from Transfer Tasks.** Given that teachers and administrators perceive a disconnect between the instructional unit's content,

the Transfer Task, and the usefulness of resulting student data, it would be meaningful for curriculum developers and teachers to discuss this disconnect and identify a strategy for alignment. Through this discussion, tasks, rubrics, and guidance for administration and data use might be clarified for all stakeholders. Such a process would then require broader professional development for teachers and administrators.

Meeting the needs of diverse student populations

To prepare for classroom observations, McREL researchers asked teachers to share information about the context of their classrooms so that researchers might better understand lesson activities. Overwhelmingly, teachers noted the diverse nature of learners and the challenge to meet student needs. Given this challenge, supporting teachers as they plan lessons for diverse learners is an important role of the ACPS curriculum guides.

McREL analysts reviewed the ACPS written curriculum documents to specifically ascertain the extent of support for ELL, SWD, and TAG. The majority of ACPS resources that address the needs of these student populations are contained in the introduction of the curriculum guides and then repeated at the end of each unit. While they are helpful first steps, the instructional resources and practices are not specific to content area or grade level and require teachers to invest more time planning, researching, and understanding how to apply the practices to the content areas. These findings were corroborated by teacher reports. Teachers considered the curriculum resources for special student populations too general and expressed interest in having specific activities and lessons.

Some teachers expressed an understanding that a division-developed curriculum guide cannot address every student need that may arise in the classroom, and this understanding may help division leaders identify a realistic balance between the supports that a curriculum guide provides and the instructional decisions that teachers make every day. To address this balance, consider the following strategies.

- 1. Convene meetings with teachers to discuss which curriculum supports for special student populations are most needed in the curriculum guide. This group should include teachers of varying education levels (elementary, middle school, high school) and be representative of those who interact regularly with diverse student populations. Once input is provided, ACPS should process this information to determine next steps and report these decisions to all ACPS teachers and administrators.
- 2. Ensure that all staff are aware of and can easily access additional guidance documents. When analyzing how the written curriculum supports the needs of special student populations, ACPS supplied McREL with additional documents such as the ACPS Language Acquisition Framework, Differentiation Framework, and Honors Design Principles. Such documents are informative and may be useful for lesson planning. Ensuring teachers are aware of and can easily access this guidance may help teachers better support diverse learners.

Support for curriculum implementation: Professional development

Once curricula and assessments are developed, support for implementation is needed to ensure alignment between the written, tested, and taught curriculum. Support may occur through division-developed professional learning or through activities established by individual schools.

While ACPS regularly offers professional development to staff, the height of attendance at professional development sessions addressing the written curriculum occurred during the 2011–2012 school year, with over 400 attendees at various professional development sessions. Since that school year, professional development has been offered to teachers new to ACPS or to teachers at a specific

education level, in a particular content area (e.g., science and social studies), or working with a special student population (e.g., ELLs and SWD).

Audit data suggest the following strategies to increase support for implementing the ACPS curriculum.

- 1. Increase availability of school-based support provided by instructional specialists and coaches. During focus groups, both teachers and administrators reported that school-based support provided by instructional specialists and coaches was particularly beneficial and that they desired an increase in such support. Administrators indicated division-developed learning sessions are typically one- or two-day training sessions and are content-dense, making it difficult for participants to retain and apply new learning in meaningful ways.
- 2. Reassess current scheduling and communication practices for professional development. Teachers who did not attend professional development indicated the sessions did not fit their schedule or they did not know the sessions were offered. These statements suggest current scheduling practices, communication strategies, and professional development delivery options should be reassessed. For example, depending on the type of information being disseminated, providing the professional development through an online platform may be effective. This use of technology would allow teachers to access the learning session on a day and at a time convenient for them. Additionally, developing a strategic process for communicating about professional learning opportunities might increase awareness and thus increase participation.
- 3. Reassess when and how staff development is conducted during the school year. If attending professional development is critical to effective implementation of the division-developed curriculum, division leaders may need to reassess when and how staff development is conducted during the school year. Both teachers and school administrators indicate school-based instructional support is beneficial, but administrators also recognize staffing to provide this service is limited. In focus groups, administrators reported that professional development offerings for teachers were often cancelled due to unforeseen circumstances such as inclement weather. Ensuring that days allotted in the school year for professional development are protected will confirm to all stakeholders the value of ongoing professional learning.

Summary

The audit collected and analyzed a vast amount of data, and it is important to note data points are not always well-aligned. That is, one group of stakeholders might perceive aspects of the ACPS curriculum as supportive of teaching and learning while another group of stakeholders may report a less positive view. This was apparent through the external review of the written curriculum; for example, McREL analysts identified some curriculum components with commendations that some ACPS stakeholders did not perceive as helpful. The comprehensive report notes diverging viewpoints and, when possible, offers discussion to address them, but resolution of diverse viewpoints is not always possible and may not be desirable. In some cases, it will be necessary for ACPS to continue dialogue with internal stakeholders to reveal the root causes of these divergent views.

The audit of the ACPS written, tested, taught, and supported curriculum indicates strengths as well as opportunities for ongoing improvement. A strategic approach for reinforcing the commendations in this report while addressing the recommendations can increase collaboration among stakeholders as well as facilitate more effective implementation of ACPS curriculum.

CHAPTER I. AUDIT TASKS AND DATA SOURCES

McREL conducted an audit of the ACPS written, tested, taught, and supported curriculum in two phases. The audit of the written and tested curriculum (Task I and Task 2) occurred from June through August of 2015, and the audit of the taught and supported curriculum (Task 3 through Task 6) occurred between December 2015 and April 2016. In both phases, data sources were identified and data collection instruments were co-developed with ACPS and utilized by McREL researchers for data collection. Table I provides each task and the data sources used to assess the task.

Table I. Audit Task and Data Sources

Audit Task	Data Sources
Task I: Determine the extent of alignment	ACPS Curriculum Guides
between the written curriculum and VA	Virginia Standards of Learning
SOLs	Interviews with ACPS curriculum developers
Task 2: Determine the extent of alignment	ACPS Transfer Tasks
between the written curriculum and the	ACPS Curriculum Guides
tested curriculum (assessments)	Virginia Standards of Learning
Task 3: Determine the extent of alignment	Classroom observations
between written curriculum and taught	Focus groups with teachers, students, and administrators
curriculum	Surveys administered to staff and parents
	ACPS Curriculum Guides
Task 4: Determine the extent to which the	ACPS guidance documents for special student populations
needs of special populations are met in the	Classroom observations
classroom	Focus groups with teachers, students, and administrators
	Surveys administered to staff and parents
Task 5: Determine the extent to which ACPS	Classroom observations
classrooms are rigorous and engaging	Focus groups with teachers and students
classi coms are rigorous and engaging	Surveys administered to staff and parents
Task 6: Determine the extent to which the	
supported curriculum (professional	Professional development documents
development, time, and materials) meets the	Focus groups with teachers and administrators
needs of division and school staff to improve student learning	Surveys administered to staff

Data Sources

Details about the data sources utilized for this audit are provided below.

Interviews with Curriculum Developers

As part of the curriculum audit, individual interviews were conducted with five key ACPS curriculum staff members. Interviews were recorded, transcribed, analyzed for trends, and submitted in report form to ACPS in June 2015. The interview protocol is available for review in Appendix A.

ACPS Curriculum Guides and Guidance Documents Task 1, Task 2, and Task 4

ACPS identified the grade levels and courses to be included in the audit. Selected courses represent key transition points in student learning (e.g., exiting elementary or middle school) and courses with high levels of student participation (e.g., Biology, World History), and are part of the Virginia Standards of Learning (VA SOLs) testing schedule for ACPS students. The elementary courses included in the audit were Grade 3 English Language Arts, Grade 3 Mathematics, Grade 3 Science, Grade 3 Social Studies,

Grade 4 Virginia Studies, and Grade 5 English Language Arts, Grade 5 Mathematics, and Grade 5 Science. The middle school courses were Grade 8 English Language Arts, Algebra I, Grade 8 Science, and Civics and Economics. The high school courses were World History I, Biology I, Geometry, and Grade II English Language Arts. These selected courses were analyzed for alignment of content and expected rigor to the VA SOLs. The VA SOLs establish minimum expectations for student learning.

ACPS provided McREL staff with access to their Blackboard system, which stores the primary curriculum documents for each subject and grade, including associated Transfer Tasks, lessons, and other guidance materials. It is important to note that the audit was limited to ACPS-developed documents and supporting online materials. Resource materials such as course textbooks were beyond the scope of this audit and thus were not reviewed.

Analysis

In collaboration with ACPS, McREL content experts developed Curriculum Evaluation Tools (CETs) for Task I and Assessment Evaluation Tools (AETs) for Task 2 to analyze the written and tested curriculum. For Task 4, McREL instructional specialists devised a rubric to assess the extent to which the written curriculum addressed the needs of targeted special student populations. These tools provided McREL content and instructional experts the means to record evidence and maintain a consistent review process during the audit. The documents were then evaluated in order to report on each criterion, and all findings were subject to review by more than one McREL expert. These tools and the rubric are available in Appendix A, and are described in greater detail in the chapters for Task I, Task 2, and Task 4.

Classroom Observations Task 3, Task 4, and Task 5

McREL researchers used a classroom observation protocol, developed in collaboration with ACPS, to: assess alignment between the written ACPS curriculum and taught curriculum, gather data on how the needs of special student populations are being met in the classroom, and examine the extent to which classrooms are rigorous and engaging¹. The protocol is available for review in Appendix B. Classroom observations lasted between 20 and 30 minutes and took place at different points during the lesson: beginning, middle, and end. Observation schedules were developed with an on-site ACPS school coordinator. In order to triangulate findings, observations were scheduled for the grade levels and courses in which the audit of written and tested curriculum was conducted.

The number of courses observed at each school was determined by considering the proportion of courses taught at each school given the total number of courses across all schools that were chosen for site visits. For example, given that a total of approximately 40 observations could be conducted at the elementary level, researchers determined the number of observations for each school by calculating the total number of classes in subjects of interest offered at that school and divided by the total number of classes offered. This number indicated the percentage of classes of interest of all classes offered by the school. This percentage was used to determine what percentage of courses would be observed at each school. For example, if school A had 17% of the courses of interest across all schools in the observation sample, then it would have 17% of the 40 possible observations conducted.

To select the courses to be observed at each school, schools that were alike based on percentage of students eligible for free or reduced lunch were split into two groups. Three schools fell below the median of students eligible for free- or reduced-price lunch, and three schools were at or above the

¹ For this audit, McREL researchers assessed what was happening in the classroom for descriptive purposes. Future classroom observation data collection could incorporate specific benchmarks, which would be based on the research literature, for normative purposes.

median. Classroom observations were distributed across the groups of schools and the courses of interest. McREL researchers randomly selected courses such that at least one grade and subject were represented for schools in the high percentage eligible for free- or reduced-price lunch group and schools in the low percentage eligible for free- or reduced-price lunch (using the median percentage of students eligible for free- or reduced-price lunch as a place for dividing the groups). The number of classroom observations conducted by subject area and grade school level are presented in Table 2.

Table 2. Distribution of Observations for Courses of Interest by School Level

Course	Number of Observations Conducted	
Elementary School		
Reading	10	
Writing	9	
Math	12	
Science	8	
Social Science	8	
Elementary Total	47	
Mi	ddle School	
Grade 8 English Language Arts	7	
Algebra I	9	
Grade 8 Science	9	
Civics & Economics	6	
Middle School Total	31	
High School		
Grade II English Language Arts	6	
Geometry	9	
Biology	7	
World History I	4	
High School Total	26	
GRAND TOTAL	104	

To assess student engagement, McREL researchers randomly selected three students from each observed classroom and tracked student behaviors at five-minute intervals. This strategy was incorporated to record whether student behaviors were on- or off-track with regard to instruction. To inform whether classroom instruction was rigorous, McREL researchers noted the perceived cognitive complexity of assigned student tasks. Student tasks were categorized on a four-point scale, with one representing the lowest level of cognitive complexity (e.g., recall, low-level skills), and four representing the highest level of cognitive complexity (e.g., complex analyses across texts, topics, problems).

Analysis

Data were disaggregated by school level (elementary school, middle school, and high school), and frequency analyses were used to analyze the classroom observation data.

Focus Groups

Task 3, Task 4, Task 5, and Task 6

Focus group protocols were developed in collaboration with ACPS to glean perspectives from ACPS secondary students, teachers, and administrators about the alignment between the written, taught, and tested curriculum; the extent to which the curriculum supports the instructional needs of special student populations; the extent to which classrooms are rigorous and engaging; and the extent to which the supported curriculum (professional development, time, and materials) meets the needs of school staff to improve student learning. Protocols were designed so that the focus groups would last no more than one hour. Protocols are provided in Appendix B. McREL researchers facilitated focus group discussions with students, teachers, and administrators; additional detail about these groups are provided in the following sections.

Students

McREL researchers conducted four secondary student focus groups, each consisting of eight to 14 participants. Potential student participants were identified by the ACPS-designated school contact. To be eligible for the focus group, students had to have taken at least one of these courses during the 2015–2016 academic year: Grade 8 English Language Arts, Algebra I, Grade 8 Science, Civics & Economics, World History I, Biology I, Geometry, and/or Grade II English Language Arts. The focus groups included mixed genders and mixed levels of achievement/school engagement. A total of 43 students participated in the focus groups; Table 3 provides the number of participating students by education level. During these focus groups, students discussed I) class discussions, 2) connections between class content and real world events, 3) challenging class assignments, 4) working with their peers, 5) whether they understood the goals for learning, 6) opportunities to monitor their progress toward learning goals, 7) opportunities to work on projects or experiments, and 8) whether they have opportunities to revise and improve upon their work.

Table 3. Student Focus Group Count

School	Count
Middle School	21
High School	22
TOTAL	43

Teachers

McREL researchers conducted seven teacher focus groups with a total of 79 teachers at the elementary, middle school, and high school levels. Potential teacher participants were identified by the ACPSdesignated school contact. For the elementary level, teachers were identified as potential participants if they were primarily responsible for Grades 3 or 5 core subjects OR Grade 4 Social Studies/Virginia Studies; participants could also include teachers primarily responsible for special student populations such as English-language learners (ELLs), talented and gifted (TAG) students, and students with disabilities (SWD). For the secondary level, teachers were identified as potential participants if they taught Grade 8 English language arts (ELA), Algebra I, Grade 8 Science, or Civics/Economics for middle school or taught World History, Biology, Geometry, or Grade 11 ELA in high school; participants could also include teachers primarily responsible for special student populations (ELL, TAG, and SWD). Secondary school contacts were asked to omit teachers who taught only Advanced Placement courses, as these courses are guided by curriculum developed outside of ACPS. Table 4 provides the number of participating teachers from each school level. Teachers discussed I) how the ACPS written curriculum meets the needs of teachers, 2) how the division-provided professional development supports implementation of the ACPS written curriculum, 3) strengths of the ACPS written curriculum, and, 4) suggested changes to the ACPS written curriculum.

Table 4. ACPS Teacher Focus Group Count

School	Count
Elementary Schools	43
Elementary-Middle School	8
Middle Schools	11
High Schools	17
TOTAL	79

Administrators

McREL researchers conducted two administrator focus groups (one for elementary level and one for secondary level), consisting of 17 participants. McREL researchers requested at least one participant from each school; Jefferson-Houston provided two participants: one for elementary and one for secondary. Participants' roles within ACPS are presented in Table 5. During these focus groups, participants discussed 1) how the written curriculum meets the needs of teachers, 2) how the division-provided professional development supports teachers and administrators, and 3) general perspectives of the ACPS written curriculum.

Table 5. ACPS Administrator Focus Group Roles

Participant Role	Count
Elementary School Principal	7
Elementary School Assistant Principal	4
Middle School Assistant Principal	2
Academic Principal	2
High School Assistant Principal	I
Curriculum Specialist	I
TOTAL	17

Analysis

After the focus groups were conducted, the audio files were transcribed for analysis. McREL researchers analyzed the transcripts from all focus groups and identified major themes for each question.

Surveys

Task 3, Task 4, Task 5, and Task 6

McREL researchers, in collaboration with ACPS staff, developed surveys to assess staff and parent perceptions of the ACPS written, taught, and tested curriculum. All surveys were administered online via an anonymous link. Researchers provided parents with the link or URL to the survey via social media or through letters sent home with children. Survey instruments are available for review in Appendix B.

ACPS Staff

The staff survey was designed to assess ACPS staff perceptions of the ACPS written, taught, and tested curriculum as it relates to rigor and engagement in the classroom; the extent to which the ACPS curriculum meets the needs of teachers and special student populations (TAG, ELL, and SWD); and the extent to which the curriculum-focused professional development opportunities meet the needs of staff. McREL administered the survey to all ACPS division and school staff, with the exception of staff whose job descriptions identified them as not directly involved in delivering curriculum.

A categorization of respondents by education level and position within ACPS can be reviewed in Table 6. Overall, 547 staff across ACPS responded to the survey (a 42% response rate). Over half of the

respondents represent the elementary education level with elementary classroom teachers representing 31% of the total number of ACPS respondents. During staff survey analysis, it was realized that secondary ACPS staff did not receive certain items intended to be included in the survey. The decision was made to re-administer that portion of the survey to respondents. Seventy-three percent of original respondents completed the second administration of the survey.

Table 6. School Staff Survey Respondents

Respondent Role	Number of Completed Surveys (Percent)	Number of Surveys Administered
Eleme	ntary	
Classroom Teacher	167 (35%)	470
ELL Teacher	35 (43%)	81
Special Ed. Teacher	19 (27%)	69
Content Specialist/Instructional Coach	42 (76%)	55
Administrator	19 (54%)	35
Other	19 (50%)	38
Elementary Total	301 (40%)	748
Middle S	School*	
Classroom Teacher	64 (39%)	164
ELL Teacher	9 (31%)	29
Special Ed. Teacher	5 (18%)	28
Content Specialist/Instructional Coach	6 (60%)	10
Administrator	7 (64%)	11
Other	0 (0%)	8
Middle School Total	91 (36%)	250
High So	chool*	
Classroom Teacher	105 (53%)	197
ELL Teacher	17 (38%)	45
Special Ed. Teacher	13 (42%)	31
Content Specialist/Instructional Coach	0 (0%)	4
Administrator	11 (65%)	17
Other	9** (180%)	5
High School Total	155 (52%)	299
GRAND TOTAL	547 (42%)	1,297

^{*} Some survey items needed to be re-administered to secondary ACPS staff; please note differences in n values when reviewing those results.

Parents

The parent survey was designed to assess parents' perceptions of their children's academic engagement, how the ACPS curriculum meets the needs of their children, and the extent to which the needs of special student populations (ELL, SWD and TAG) are met by ACPS programs and services. McREL researchers developed survey items in collaboration with ACPS; surveys were administered in English, Spanish, and Arabic via social media or through a letter sent home to parents with children. Table 7 displays the number of surveys completed for each language.

^{**} ACPS staff self-selected their role within ACPS; four more high school staff identified as "Other" rather than indicating their ACPS-designated role.

Table 7. Number of Completed Parent Surveys by Language

Language	Number of Completed Surveys
English	1305
Spanish	80
Arabic	13
Total	1398

Overall, 1,358 parents of ACPS students responded to the survey. The majority of parents indicated having child(ren) at one education level in ACPS (n=967; 71%), while just under 30% of parents reported having child(ren) at multiple levels in ACPS (n=391; 29%). A categorization of respondents' race/ethnicity by child's education level can be reviewed in Tables 8 and 9, respectively. Please note that respondents could select more than one race/ethnicity and some respondents did not indicate their race/ethnicity.

Table 8. Parent Survey Respondents with Child(ren) at One Education Level in ACPS

Child(ren) at One Education Level	Count (Percent)	
Elementary		
American Indian or Alaskan Native	3 (0.4%)	
Asian	34 (4.6%)	
Black or African American	110 (14.8%)	
Hispanic or Latino	76 (10.2%)	
Native Hawaiian or Other Pacific Islander	I (0.1%)	
White	451 (60.6%)	
Other	17 (2.3%)	
More Than One Race/Ethnicity	40 (5.4%)	
Did not indicate Race/Ethnicity	12 (1.6%)	
Elementary Total	744	
Middle School	<u> </u>	
American Indian or Alaskan Native	0 (0%)	
Asian	6 (5.9%)	
Black or African American	18 (17.8%)	
Hispanic or Latino	10 (9.9%)	
Native Hawaiian or Other Pacific Islander	0 (0%)	
White	56 (55.4%)	
Other	5 (5%)	
More Than One Race/Ethnicity	5 (5%)	
Did not indicate Race/Ethnicity	I (I%)	
Middle School Total	101	
High School		
American Indian or Alaskan Native	0 (0%)	
Asian	5 (4.1%)	
Black or African American	16 (13.1%)	
Hispanic or Latino	13 (10.7%)	
Native Hawaiian or Other Pacific Islander	0 (0%)	

Child(ren) at One Education Level	Count (Percent)
White	77 (63.1%)
Other	4 (3.3%)
More Than One Race/Ethnicity	6 (4.9%)
Did not indicate Race/Ethnicity	I (0.8%)
High School Total	122
GRAND TOTAL	967

Table 9. Parent Survey Respondents with Children at Multiple Education Levels in ACPS

Child(ren) at Multiple Education Levels	Count (Percent)
American Indian or Alaskan Native	0 (0%)
Asian	21 (5.4%)
Black or African American	66 (16.9%)
Hispanic or Latino	53 (13.6%)
Native Hawaiian or Other Pacific Islander	I (0.3%)
White	203 (51.9%)
Other	19 (4.9%)
More Than One Race/Ethnicity	22 (5.6%)
Did not indicate Race/Ethnicity	6 (1.5%)
TOTAL	391

Analysis

Frequency analyses were used to analyze the survey data. For analysis of the ACPS staff survey, data were disaggregated by education level (elementary school, middle school, and high school) and staff position. For analysis of the parent survey, data were disaggregated by parents with children at one or multiple education levels in ACPS. For parents with child(ren) at one education level, those data were further disaggregated by education level: elementary, middle school, and high school. As a precautionary measure, McREL researchers did not report findings for cases in which there were fewer than five respondents. For example, if there were three parents who had a child in an ACPS middle school, survey results are suppressed to maintain respondent confidentiality.

Professional Development DocumentsTask 6

ACPS provided McREL with documents detailing the division-provided professional development offered to ACPS teachers and leaders to support implementation of the ACPS written curriculum. The documents included the 2010–2012 ACPS Curriculum Professional Development Plan, the 2013 to Present ACPS Curriculum Professional Development Plan, and a data file with information on professional development provided between the 2009–2010 school year and the current 2015–2016 school year. The data file included the number of attendees at the numerous professional development course offerings provided by ACPS. The data file did not include information about professional development purpose, objectives, or intended audience. These limitations may be due in part to a transition to a new professional development data management system.

Analysis

McREL researchers conducted frequency analyses on the data contained in the data file. Results include the number of ACPS staff who participated at the ACPS-provided professional development on the written curriculum.

CHAPTER 2. INTERVIEWS WITH CURRICULUM DEVELOPERS

Interview Process

In May 2015, Alexandria City Public Schools (ACPS) contracted with McREL International (McREL) to initiate the audit of written, tested, and taught curriculum. To inform the audit, interviews were conducted with key ACPS curriculum staff to gather information about the curriculum development process as well as glean interviewee perspectives about the intended use of the curriculum. Phone interviews of approximately 45 minutes each were conducted with five ACPS curriculum staff who developed the ACPS written curriculum. The interview protocol, which included 29 questions with numerous follow-up questions, was collaboratively developed with ACPS (see Appendix A).

Curriculum Development Process

All five interviewees reported using *Understanding by Design* (UbD) (Wiggins & McTighe, 2005), which promotes the idea of backward design. Additionally, the Virginia Standards of Learning and Curriculum Framework (Virginia Department of Education, 2012) were used as the foundation for the ACPS written curriculum content.

There was a five-year development process starting in 2009 when ACPS division-level staff were trained on the UbD framework including an in-depth examination of the three UbD components. In the second year, unit level guides that encompassed the three UbD components were completed. In the third, fourth, and fifth years (or 2011–2013), updates were made to the unit level guides based on teacher and principal feedback. For example, hyperlinks were added based on teacher requests to facilitate access to Transfer Tasks.

Stakeholder Involvement

Interviewees reported that teachers were involved in the curriculum development process. First, teachers participated in an UbD workshop to understand the process that was being used to develop the curriculum. Instructional coaches would meet on a monthly basis with teachers from various subject areas and grade levels in drafting the unit guides' scope and sequence. Further, multiple procedures have been used to garner teacher feedback. One interviewee shared that a survey was administered to obtain teacher feedback on the written curriculum, and revisions were made to the written curriculum based on their feedback. Additionally, feedback is garnered on an ongoing and regular basis during vertical team meetings and through Blackboard.

Additional stakeholders were also involved in the curriculum development process; these included ACPS school administrators, School Board members, and parents of ACPS students. ACPS School Board members contributed to the big ideas and the structure of the written curriculum. As with ACPS teachers, school administrators have opportunities to provide feedback through monthly meetings.

The parents of ACPS students were invited to back-to-school and curriculum nights at some ACPS schools so they could become familiar with the written curriculum. At-a-Glance documents provide parents information on the sequence of units and a description of the units' content. Further, the elementary school progress reports have curriculum information contained in them; these progress reports are currently being revised to be more user-friendly for parents, based on parent feedback.

Challenges and Successes

Interviewees reported many challenges and successes in the development of the ACPS written curriculum. The reported challenges include the short time frame for transitioning the ACPS pacing guides into a written curriculum aligned with the VA SOLs, the task of developing curriculum that is meaningful and yet accessible and manageable for teachers; translating the written curriculum and subsequent revisions into numerous languages to accommodate the needs of the community; and the length of the earlier versions, which made using the guides cumbersome.

The reported successes of the ACPS written curriculum development included providing greater meaning to the VA SOLs through the big ideas, essential questions, and conceptual understandings for each unit; making curriculum revisions based on user feedback in a timely manner; developing curriculum which is sensitive of students' developmental progress; ensuring that the vertical alignment from one grade to the next provides content coherence; and allowing flexibility for teachers to incorporate their own resources.

User Friendliness

Interviewees indicated that the ACPS written curriculum is more user-friendly in the current version than in previous iterations. Further, interviewees perceive that user knowledge of the UbD framework and three-stage design is correlated to whether users believe the curriculum is user-friendly; the more understanding that users have of the UbD framework, the easier the navigation. Additionally, interviewees reported that, as users receive more professional development on the written curriculum, they perceive it as easier to use and more helpful.

Suggested Changes

Interviewees provided numerous changes for the next version of the ACPS written curriculum. Suggested changes include adding sample lesson plans that differentiate for student needs; providing more support for teachers to use the curriculum to meet a wide range of student needs; offering more support for teachers to create daily lessons from the Stage Three Learning Plan; furnishing additional hyperlinks to the Virginia Department of Education's sample lesson plans; and making the curriculum web-based and digital. Interviewees reiterated the importance of the written curriculum being an easy tool for teachers to use as they prepare lessons, provide instruction, and assess student learning.

Intended Use of the Curriculum

Interviewees described the intended use of the ACPS written curriculum by division-level and school-level staff. For division-level staff, the curriculum establishes expectations for what should be occurring in ACPS classrooms. It also provides a guide for ACPS within specialty offices (e.g., ELL and Specialized Instruction offices) to develop supplemental materials to meet students "where they are" in terms of language proficiency.

For principals, the written curriculum helps them set expectations for teachers, provides consistency, and sets the pace for teaching throughout the school year. It also assists principals with knowing what to look for in a classroom. This is particularly useful for classroom observations; however, it should not be used as a "gotcha" for teacher accountability.

For teachers and teacher teams, the written curriculum is a guide to help plan their instruction in terms of what students should know and how students will demonstrate what they have learned. It provides a starting point for conceptualizing the units of instruction. The written curriculum is also a repository of resources.

Implementation

Interviewees were asked about the level of written curriculum implementation across the division, using the response options of *not implemented at all, planning for implementation, partially implemented,* or *fully implemented.* They reported partial implementation of the ACPS written curriculum across the division. Interviewees also reported variation in implementation of the curriculum across ACPS schools. Variation occurred by level (i.e., elementary, middle, or high) and by subject area. Also, within a school, there is variability of implementation across teachers; some teachers are fully using the written curriculum while others are not using it. In general, interviewees perceive that schools with higher levels of implementation are ones where the principals have adopted and become familiar with the written curriculum. On the flip side, schools with lower levels of implementation are ones that have had a high level of principal and/or teacher turnover. The interviewees reported that their perspectives are based on anecdotal evidence, including discussions with teachers and principals.

Support

Interviewees reported numerous avenues by which principals and teachers have received and continue to receive support to implement the written curriculum. Interviewees provided an historical perspective of the curriculum implementation support provided to principals and teachers. In 2009, professional development sessions were conducted at each school on Stage One Desired Results by ACPS curriculum specialists. Then, in 2010, professional development was provided on the three levels of the Transfer Tasks in Stage Two. During the following years, the division held a series of monthly curriculum orientation sessions that included the UbD framework, the backwards design process, essential questions in the classroom, unpacking the standards within the context of the curriculum, balanced assessments using Transfer Tasks, and student engagement. In 2014, there was close collaboration between Curriculum Design Services, English-language learner (ELL) Services, Special Education Services, and the Talented and Gifted (TAG) Program to support implementation based on differentiation of instruction for special student populations.

Closing Comments

To close the interviews, each interviewee reported the greatest strength and challenge of the ACPS written curriculum. The greatest strengths of the written curriculum include the presence of high standards, focus on the big ideas and rigor, provision of many resources for teachers, conceptual design, fidelity to the backward design process, differentiation for special student populations, alignment with the Virginia SOLs, and the inclusion of clear targets for students.

The greatest challenges of the written curriculum include the implementation of the curriculum, tension between the VA SOLs and the way in which they are assessed, time to receive training and support to implement the curriculum, making the curriculum flexible for teachers to use based on their level of expertise and experience as a teacher, and the online PDF format of the current version of the written curriculum.

Interviewees also provided their insights into a change that would have the greatest positive impact to the written curriculum moving forward. The changes reported include finding additional ways to make the curriculum flexible for teachers; providing additional lesson plan samples and models; continuing to collaborate and coordinate with other ACPS offices like TAG, ELL, and Specialized Instruction; bolstering principal leadership for curriculum implementation; engaging with teacher leaders in the curriculum implementation; and making the curriculum web-based instead of an online PDF document.

CHAPTER 3. TASK 1: DETERMINE THE EXTENT OF ALIGNMENT BETWEEN THE WRITTEN CURRICULUM AND VA SOLS

State Standards and Content Alignment

The Virginia Department of Education identifies Standards of Learning for Virginia public schools to establish minimum expectations for what students should know and be able to do at the end of each grade or course in English, mathematics, science, social science/history and other subjects. Each school division then develops curriculum (content, pacing, and primary resources) to provide guidance to instructional staff in support of student learning. When the division-developed curriculum is well-aligned to state standards in both content and expected level of rigor, students are more likely to engage in learning experiences that will lead toward mastery of state standards. Task 1 is designed to determine the extent of alignment between the ACPS written curriculum and the VA SOLs.

Commendations and Recommendations

In July and August 2015, McREL submitted 16 reports detailing the extent of alignment between the written curriculum and the VA SOLs (Task I) for each analyzed curriculum guide. In those reports, commendations and recommendations were specific to the content area (ELA, mathematics, science, social science/history) and grade level being analyzed. This chapter reports on the aspects of the ACPS curriculum guides that are consistently strong across all four subject areas, as well as aspects across the content areas that can be improved. Commendations and recommendations are noted below.

Commendations

- The ACPS curriculum guides were developed using a common framework for all education levels (elementary, middle school, high school) and all content areas. This is especially helpful to teachers who teach multiple grade levels, content areas, and/or courses.
- The ACPS curriculum guides facilitate a variety of diverse learning experiences, including group work, individual work, and project-based learning.
- Useful literary recommendations provide opportunities to link lessons across different content areas in the curriculum guide.
- Choices of activities and teaching strategies are provided for both teachers and students, which allows for flexibility and differentiation.

Recommendations

- Cite the VA SOLs that are addressed by all lessons to include the online lessons and
 resources referenced in the curriculum guide. Creating an explicit line of sight between the
 VA SOLs and all elements of the curriculum guide will assist teachers with tracking the progress of
 their students on the VA SOLs and strengthen the alignment among the components of the
 written curriculum.
- Add activities or lessons to address those VA SOLs that are marginally or weakly addressed.
- Provide instructional guidance that is specific to the individual unit's subject matter content. While the Learning Plan contains excellent guidance for formative assessment, executive function, and other instructional approaches linked to *Understanding by Design* (2005), these recommendations are often generalized and repeated verbatim in each unit. For example, the text

box about "Key Components of Unit Instructional Sequence" is always the same; in addition, very generic instructions are often provided such as, "Provide opportunities for differentiation," without any guidance for how the particular content or skills in the unit might be differentiated. Providing more specific suggestions for implementing these approaches with the unit content will improve the likelihood these instructional approaches are consistently adopted and used by teachers.

Analysis

Task I

To determine the alignment between the ACPS written curriculum and the VA SOLs, a set of criteria and associated tools were developed in collaboration with ACPS staff. These tools, called the Curriculum Evaluation Tool (CET), provided McREL content analysts the means to record evidence of alignment between the ACPS curriculum guides and the VA SOLs. The alignment criteria used for Task I were:

- CET 1. Content alignment between the curriculum and the Standards of Learning: Content in the curriculum guides address the same knowledge and skills as the VA SOLs for the given grade or course.
- CET 2. Cognitive demand of the curriculum compared to the Standards of Learning: The curriculum guides require comparable cognitive demand as the VA SOLs for the same content area knowledge and skills.
- CET 3. Degree of content alignment between the curriculum and 21st Century Skills: Content in the curriculum guides address the knowledge and skills identified in the Framework for 21st Century Skills developed by the P21 Partnership for 21st Century Learning.²
- **CET 4: Content Alignment between the curriculum and SOL Goals:** Content in the curriculum guides integrate the goals identified by the VA SOLs (Applicable to math and science only).

The rubrics used to evaluate the alignment between the written curriculum and Standards for Learning were rigorous. The rating scale was 0 (*Not Found*), 1 (*Weak*), 2 (*Marginal*), 3 (*Adequate*), and 4 (*Excellent*). To achieve an excellent rating (a rating of 4 on criterion CET 1), more than 95% of the VA SOLs had to be thoroughly addressed, and to achieve an excellent rating (a rating of 4 on criterion CET 2) more than 95% of the VA SOLs had to be applied at the same or higher degree of difficulty in the curriculum. In addition to the 0–4 rating scale, in some cases criteria are Not Rated (NR) because there was not enough evidence in the curriculum guides to make a fair judgment about cognitive demand or the curriculum indicated that content was addressed in materials outside the scope of this audit. ACPS curriculum guides were reviewed from four grade levels: Grade 3, Grade 5, Grade 8, and one high school course per content area. Since ACPS elects to teach Virginia Studies at Grade 4 rather than at Grade 5, ACPS requested McREL to analyze the Grade 4 Virginia Studies course instead of Grade 5 social science.

Audit Limitations

For Task I, limitations for the audit of the ACPS written curriculum include the sampling method and eliminating instructional support materials such as textbooks from the audit. ACPS curriculum guides for ELA (reading and writing), mathematics, science, and social science/history were reviewed for select

² It is important to note that ACPS curriculum was not originally developed to align with the Framework for 21st Century Skills. ACPS requested this comparison study to inform ongoing improvement efforts. Details of this comparison were provided as an appendix in each grade level report.

grades and courses across education levels, elementary through high school. These selected courses may not accurately represent the characteristics of curriculum guides at all other grade levels. Further, the curriculum guides reference a wide variety of online resources and textbook materials that were not reviewed for their cognitive demand or content coverage as these materials were beyond the scope of the audit. Some online resources were sampled to note their attributes and role in the curriculum, but a thorough review of resources identified in the curriculum guide was not conducted. In mathematics, in particular, the curriculum guide relies heavily on a referenced textbook and a review of the textbook was beyond the scope of this audit.

ACPS Written Curriculum

The primary documents in the ACPS written curriculum are the Curriculum Guides, which are provided for each individual grade or course and include links to the Transfer Tasks and other support material. Each curriculum guide begins with an introduction that provides an overview of the course and curriculum; the introduction is followed by a Year-at-a-Glance page, which provides pacing for each unit and a list of the primary standards addressed in each unit.

The individual units in the Curriculum Guides employ the end-in-mind design advocated by the authors of *Understanding by Design* (Wiggins & McTighe, 2005). In this design, each unit has three stages: Stage One (Desired Results), Stage Two (Assessment Evidence), and Stage Three (Unit Learning Plan).

Stage One (Desired Results) lists the VA SOLs that are addressed in the unit, as well as the more specific Declarative and Procedural Knowledge Objectives associated with each standard within the Virginia Department of Education's Curriculum Frameworks. Stage One also provides Essential Questions, Suggested Resources, and a Transfer Goal for each unit.

Stage Two (Assessment Evidence) describes the assessments in each unit, including a diagnostic preassessment for some subjects/units and a summative assessment (Transfer Task). The Transfer Tasks are differentiated into three levels, with more or less support provided to students and include one or more rubrics to assess student performance on the task.

Stage Three (Unit Learning Plan) presents suggested teaching and learning activities to support the knowledge and skills listed in Stage One and assessed in Stage Two. The content of Stage Three varies somewhat by subject and grade, but generally includes instructional guidance, links to lesson plans on the ACPS Blackboard site, descriptive activities and lesson ideas, and links to online lesson plan sites and resources.

Ratings

Overall ratings across subjects are provided below for alignment between the ACPS written curriculum and the Virginia Standards of Learning (CET 2, and 4), followed by more specific findings for each content area. Alignment to math and science practices (CET 4) is reported only in those subjects. Overall findings regarding the alignment of the written curriculum to 21st century skills (CET 3), is reported in the appendices of each grade level report. The rating scale was 0 (*Not Found*), 1 (*Weak*), 2 (*Marginal*), 3 (*Adequate*), and 4 (*Excellent*)—as well NR (Not Rated) when potential evidence was not available for review. Data regarding the alignment of specific grade-level VA SOLs is available in separate technical reports that were developed for each subject area and grade level.

Criterion CET I describes whether content in the curriculum guides address the same knowledge and skills as the Virginia Standards of Learning for the given grade or course. While all of the VA SOLs may be listed in the curriculum guides, there is less evidence for how teachers might address every standard

at some grade levels. For ELA and mathematics, the curriculum guides more clearly reflect a greater breadth of Virginia standards content in elementary grades than in middle and high school grades. The science curriculum guide offers the strongest evidence of Virginia Standards of Learning coverage in Grades 5 and 8, while the social studies curriculum guide consistently addresses a majority—but less than 85%—of VA SOLs, earning a rating of 2 (*Marginal*) at every grade level. Ratings across content areas for the degree to which the written curriculum aligns with content in the VA SOLs are shown in Figure 1.

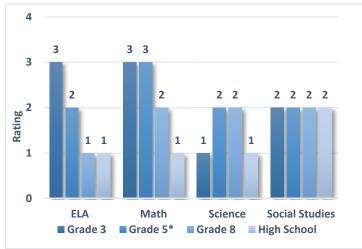


Figure 1. Content Alignment between the Curriculum Guides and the VA SOLs (CET I)

0	The curriculum does not address any of the content of the SOL.
I	The curriculum addresses less than half of the content of the SOL, or the emphasis and meaning of the content in the curriculum differs importantly from the standards. Less than 65% of the standards are rated adequate or excellent.
2	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority, but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.
3	The curriculum adequately addresses all important aspects of the SOL. More than 85% of all standards are rated adequate or excellent.
4	The curriculum thoroughly addresses all important aspects of the SOL in a variety of ways and may address subtle aspects of the content.

Criterion CET 2 describes whether the curriculum guides require comparable cognitive demand as the VA SOLs for the same content area knowledge and skills. Nearly all of the reviewed curriculum guides apply content at the same or higher cognitive level as required by the VA SOLs. In mathematics, more than 95% of the VA SOLs are applied in the curriculum guide at the same or at a higher level as is required by the VA SOLs. In one case—Grade 3 science—less than 70% of VA SOLs are addressed by the curriculum guide at the same or higher cognitive level. In two cases—high school ELA and science—the evidence is insufficient to draw conclusions regarding cognitive demand, and so these courses were Not Rated (NR). Many SOLs for 11th grade ELA and science are not addressed by the written curriculum, so there is too little content to review to produce a valid assessment of cognitive demand. Ratings across content areas for CET 2 are shown in Figure 2.

^{*} ACPS elects to teach Virginia Studies at Grade 4.

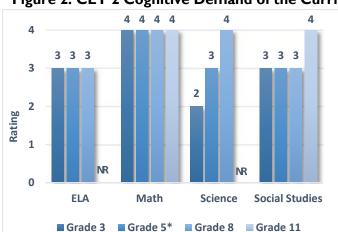


Figure 2. CET 2 Cognitive Demand of the Curriculum Guides Compare to the VA SOLs

data insufficient to make a valid judgment.

No SOLs are applied at the same or higher

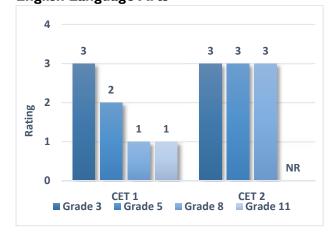
Very few (<50%) SOLs are applied at the same

cognitive level in the curriculum.

English Language Arts (ELA)

The curriculum guide for ELA (reading and writing) was reviewed for Grades 3, 5, 8, and 11 (American literature). For CET 2, the curriculum guide was consistently rated a 3 (Adequate) across most criteria for Grades 3, 5, and 8; however, the degree to which all the VA SOLs are explicitly addressed (CET 1), was rated lower in Grades 5, 8, and 11 because the curricular units provided fewer specific activities and lessons to demonstrate how VA SOLs are addressed in each unit. Ratings are shown in Figure 3.

Figure 3. Alignment of Content (CET I) and Cognitive Demand (CET 2) to VA SOLs for English Language Arts



CET	1
ı	The curriculum addresses less than half of the content of the SOL, or the emphasis and meaning of the content in the curriculum differs importantly from the standards. Less than 65% of the standards are rated adequate or excellent.
2	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority, but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.
3	The curriculum adequately addresses all important aspects of the SOL. More than 85% of all standards are rated adequate or excellent.
CET	2
3	Most (>70%) SOLs are applied at the same or higher cognitive level in the curriculum.
NR	Not rated due to insufficient content alignment; data insufficient to make a valid judgment.

The ELA curriculum guide is commended for multiple curriculum elements:

- The instructional sequence and cycle that allows for modeling and practice, building students' knowledge over the course of the unit.
- Choice of research and writing topics allows for student engagement with subjects that interest individual learners.
- The Grades 3 and 5 curriculum guides provide strong support for elementary teachers to implement effective reading and writing workshops. The curriculum guides provide in-depth descriptions of the workshop model, and the workshops are clearly tied to grade level standards.

or higher cognitive level in the curriculum.

2 Some (between 50-70%) SOLs are applied at the same or higher cognitive level in the curriculum.

3 Most (>70%) SOLs are applied at the same or higher cognitive level in the curriculum.

4 Nearly all (>95%) SOLs are applied at the same or higher cognitive level in the curriculum.

NR Not rated due to insufficient content alignment;

^{*} ACPS elects to teach Virginia Studies at Grade 4.

For example, suggested activities within reading workshops explicitly support standards for comprehension strategies and vocabulary development.

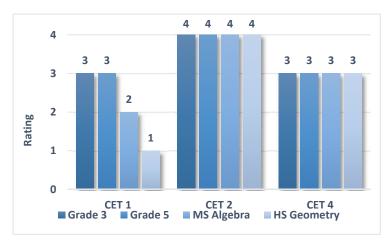
The ELA curriculum guide may be improved by considering the following recommendations:

- Give equal attention to speaking and writing standards: The curriculum guides provided less evidence for addressing speaking and writing standards than reading. To more clearly address these skills in the curriculum, it is recommended that they be directly linked and embedded into evaluation rubrics that are used for instruction and assessment. For example, expectations in the standards that students are able to speak clearly using an appropriate volume and pitch may be incorporated into rubrics that are used during instruction and used to evaluate student speaking skills.
- Further develop the high school ELA curriculum: The Grade II curriculum guide had a significant amount of content not addressed (CET I) and, thus, lacked enough evidence to be rated on the rigor of that content (CET 2). Across criteria, Grade II scored lower than other grade level curriculum guides. It is recommended that the high school curriculum guide for ELA be further developed to provide lessons and activities that address specific texts and topics. For example, the reading skills described in the curriculum guides would be easier for teachers to incorporate into instruction if those skills were described within the context of specific core texts that students read during the unit.

Mathematics

The ACPS curriculum guide for mathematics was reviewed for Grades 3, 5, Algebra I, and Geometry. Mathematics included a criterion not used in all subjects which relates to the alignment of the curriculum guide to mathematical procedures identified in the VA SOL Goals (CET 4). There is more evidence the mathematics curriculum guide in the elementary grades address all VA SOLs than in the secondary grades (CET I). Nearly all VA SOLs addressed by the curriculum guide are applied at the same or higher cognitive level as required by the VA SOLs (CET 2) across all grade levels. There is also consistent alignment between the curriculum guide and the VA SOL Goals for mathematical procedures (CET 4). Ratings are shown in Figure 4.

Figure 4. CET 1, CET 2, and CET 4 Ratings for Mathematics



CET I					
I	The curriculum addresses less than half of the content of the SOL, or the emphasis and meaning of the content in the curriculum differs importantly from the standards. Less than 65% of the standards are rated adequate or excellent.				
2	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority, but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.				
3	The curriculum adequately addresses all important aspects of the SOL. More than 85% of all standards are rated adequate or excellent.				
CET	2				
4	Nearly all (>95%) SOLs are applied at the same or higher cognitive level in the curriculum.				
CET	4				
3	The curriculum usually presents a balance of mathematical procedures and deeper conceptual understanding.				

The mathematics curriculum guide is commended for:

 Nearly all of the mathematics VA SOLs are addressed at the same level of cognitive demand as the VA SOLs. This rigor is due, in part, because the majority of the Mathematical Goals were adequately addressed (CET 4); mathematical problem solving, communication, reasoning, and representation were embedded in the Alternative Pre-Assessments and Transfer Tasks, which increases the level of cognitive demand required. In addition, teachers are given guidance regarding specific aspects of these goals using links and advice related to each topic.

The mathematics curriculum guide may be improved by considering the following recommendations:

- Address gaps by adding activities or lessons: Activities or lessons should be added to the
 curriculum guides for Algebra I and Geometry in the secondary grades in order to meet the full
 scope of standards at those grade. In particular, Grade 8 standards related to statistics were all
 rated marginal or weak. Additional gaps of coverage may be reviewed within the grade-specific
 technical reports.
- Review textbook alignment: Across grades, the mathematics curriculum guide relies on textbooks that were beyond the scope of this audit. It is recommended that the alignment of these textbooks to the VA SOLs be reviewed and shared across classrooms in order to support teachers in using textbook content within the frame of the VA SOLs.

Science

The curriculum guide for science was reviewed for Grades 3, 5, 8, and high school Biology. The science review included a subject-specific criterion (CET 4), which relates to the alignment of the curriculum guide to inquiry skills identified in the VA SOL Goals for science.

Overall, the curriculum guide presents a balance of Virginia Goals/Inquiry Skills and deeper conceptual understanding (CET 4), although in some cases inquiry skills are repeated within the Learning Plan for multiple units with little or no variation. The curriculum guide for high school biology had a significant

amount of content not addressed (CET I), lacking enough evidence to be rated on the rigor of that content (CET 2). Ratings are shown in Figure 5.

Figure 5. CET I, CET 2, and CET 4 Ratings for Science

	4 -							4					
	3 -						3			3	3	3	
bū	2 -		2	2		2							2
Rating													
	1 -	1			1								
	0 -								NR				
			CE.				CE				CE	Г4	
		■G	rade	3	Grade	5	■ Gr	ade	8 ■ HS	Bio	logy		

1	The curriculum addresses less than half of the content of the SOL, or the emphasis and meaning of the content in the curriculum differs importantly from the standards. Less than 65% of the standards are rated adequate or excellent.
2	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority, but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.
CET	2
2	Some (between 50-70%) SOLs are applied at the same or higher cognitive level in the curriculum.
3	Most (>70%) SOLs are applied at the same or higher cognitive level in the curriculum.
4	Nearly all (>95%) SOLs are applied at the same or higher cognitive level in the curriculum.
CET	4
2	The curriculum sometimes presents a balance of science goals and deeper conceptual understanding.
3	The curriculum usually presents a balance of mathematical procedures and deeper conceptual understanding.

CET I

The science curriculum guide is commended for:

 Thoroughly covering those standards that are addressed by the curriculum. For example, some units include multiple activities to strategically build students' knowledge for a given standard, as well as descriptions of related common misconceptions that teachers should address as part of effective science teaching.

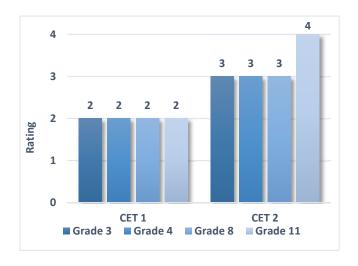
The science curriculum guide may be improved by considering the following recommendations:

- Extend curriculum guide: The curriculum guide should be reviewed for ways to more clearly incorporate the full breadth of content of the VA SOLs in lessons and activities (CET I). As the lessons and activities in the curriculum guide are expanded, it is recommended that some activities be selected to intentionally build connections between science, technology, engineering, and mathematics.
- Reorganize activities and lessons: Some of the current activities and lessons align to the VA SOLs, but would be better organized within a different unit, per the unit objectives and essential questions. Details regarding this issue may be found within the grade-specific technical reports.

Social Studies

The curriculum guide for social studies was reviewed for Grades 3, 4 (Virginia Studies), 8 (Civics and Economics), and II (World History I). Overall, the social studies curriculum guide earned high ratings; however, CET I (regarding the degree to which all the VA SOLs are explicitly addressed) was given a rating of 2 (Marginal) because less than 85% of the standards were thoroughly addressed. In most cases, the gaps in content coverage are centered on a specific topic and could be easily remedied with a strong lesson or series of activities focused on that topic. Ratings are shown in Figure 6.

Figure 6. CET I and CET 2 Ratings for Social Studies



CETT						
2	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.					
CET	- 2					
3	Most (>70%) SOLs are applied at the same or higher cognitive level in the curriculum.					
4	Nearly all (>95%) SOLs are applied at the same or higher cognitive level in the curriculum.					

The social studies curriculum guide is commended for:

- The social studies curriculum guide includes a variety of diverse learning experiences, including group work, individual work, and activities, that support reading and writing across the curriculum (e.g., vocabulary, writing, and speaking opportunities).
- The curriculum guides provide many links to primary and secondary sources and online activities. Many of these resources are interactive and web-based, which are likely to engage students. Incorporating interactive technology may spur student interest and motivation.
- The written curriculum for social studies consistently requires students to apply skills at the same or higher degree of difficulty as is required by the SOLs (CET 2).

The social studies curriculum guide may be improved by considering the following recommendation:

• Add or expand lessons to cover all standards: Not all of the standards are addressed, and so lessons should be added or expanded to clearly incorporate the expectations of all standards (CET I).

CHAPTER 4. TASK 2: DETERMINE THE EXTENT OF ALIGNMENT BETWEEN THE WRITTEN CURRICULUM AND THE TESTED CURRICULUM (ASSESSMENTS)

Content and Assessment Alignment

Alignment between content identified for instruction and content identified for assessment provides a clear line of sight between the knowledge and skills that students should know and be able to do and the assessment of that knowledge and skill. This alignment ensures both teachers and students that the tested content will be thoroughly addressed during instruction. In the ACPS written curriculum, Stage Two, Assessment Evidence describes the division-created assessments known as Transfer Tasks, which are developed for each unit of instruction. Stage Two also provides general guidance for formative assessment. The purpose of Task 2 is to determine the extent of alignment between the content of the written curriculum which includes VA SOLs and the tested curriculum.

Commendations and Recommendations

In July and August 2015, McREL submitted 16 reports detailing the extent of alignment between the written curriculum and the tested curriculum (Task 2) for each analyzed curriculum guide. In those reports, commendations and recommendations were specific to the content area (ELA, mathematics, science, social science/history) and grade level being analyzed. This report documents aspects of the Transfer Tasks that are consistently strong across all four content areas, as well as aspects that can be improved. Commendations and recommendations are noted below.

Commendations Across Subjects

- Transfer Tasks, as supported by the approach articulated in *Understanding by Design* (Wiggins & McTighe, 2005), place emphasis on real-world contexts. This approach will likely engage students and deepen their content knowledge and skills, as well as promote critical thinking skills.
- When Transfer Tasks are embedded in the curriculum guides, they provide teachers with formative data regarding students' strengths and needs that can be applied as teachers differentiate their instruction, lessons, and activities.

Recommendations Across Subjects

• Cite the VA SOLs that are addressed by all Transfer Tasks and evaluation rubrics. Creating an explicit line of sight between the VA SOLs and all elements of the curriculum guide and assessment will assist teachers with tracking the progress of their students on the VA SOLs and will strengthen the alignment among the components of the curriculum guides. It is important to note that although McREL analysts rated the real-world design of Transfer Tasks as commendatory, ACPS teachers voiced diverging viewpoints regarding the usability of data from these tasks. Further discussion with teachers will help curriculum developers better understand the root cause of differing teacher perspectives.

Analysis

Task 2

Similar to Task I, a set of criteria and associated tools were developed to assess the alignment and cognitive demand of the assessments (Transfer Tasks) used in the curriculum guides. These tools, called

the Assessment Evaluation Tool (AET), provided McREL content analysts the means to record evidence of alignment between the Transfer Tasks, the ACPS curriculum guides, and VA SOLs. The alignment criteria used for Task 2 were:

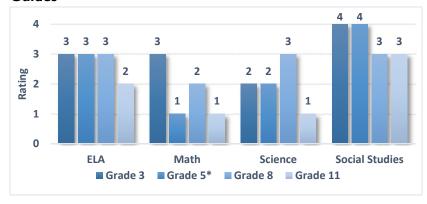
- AET I. Content alignment between the Transfer Tasks and the curriculum: The embedded Transfer Tasks emphasize the same knowledge and skills as the curriculum guides.
- AET 2. Cognitive demand of the Transfer Tasks compared to the curriculum: The curriculum guides require comparable cognitive demand as the embedded Transfer Tasks for the same content area knowledge and skills.

The rubrics used to evaluate alignment between the written curriculum and Transfer Tasks were rigorous. The rating scale was 0 (*Not Found*), I (*Weak*), 2 (*Marginal*), 3 (*Adequate*), and 4 (*Excellent*). To achieve an *Excellent* rating of 4 on AET I, all of the knowledge and skills required by the Transfer Tasks must be emphasized in the corresponding curricular unit. To achieve an *Excellent* rating of 4 on AET 2, the curriculum guides had to include evidence that students build systematically toward the difficulty level required by the VA SOLs and that students have an opportunity to extend their knowledge and skills. As with the CET criteria, some grade levels were Not Rated (NR) on Task 2 AET criteria because there was not enough evidence in the curriculum guides to make a fair judgment about cognitive demand, or the curriculum indicated that content is addressed in materials beyond the scope of this audit. ACPS curriculum guides and associated Transfer Tasks were reviewed from four grade levels: Grade 3, Grade 5, Grade 8, and one high school course from each content area. The Transfer Tasks for Grade 4, Virginia Studies, were also reviewed.

Ratings

Criterion AET I describes whether the embedded Transfer Tasks emphasize the same knowledge and skills as the curriculum guides. The rating scale was 0 (*Not Found*), I (*Weak*), 2 (*Marginal*), 3 (*Adequate*), and 4 (*Excellent*). The requirement is demanding. To earn a rating of 3 (*Adequate*), more than 90% of the knowledge and skills required by the Transfer Task must also be emphasized in the corresponding curricular unit. A rating of 4 (*Excellent*) requires that all of the knowledge and skills required by the Transfer Task be emphasized in the corresponding unit. Ratings are presented in Figure 7.

Figure 7. AET I Content Alignment Between the Transfer Tasks and the Curriculum Guides



^{*} ACPS elects to teach Virginia Studies at Grade 4.

0	None of the knowledge and skills required by the transfer task are emphasized in the corresponding unit.
1	Less than half of the knowledge and skills required by the transfer task are emphasized in the corresponding unit.
2	Most of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.
3	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.
4	All of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.
NR	Not rated due to insufficient content alignment; data insufficient to make a valid judgment.

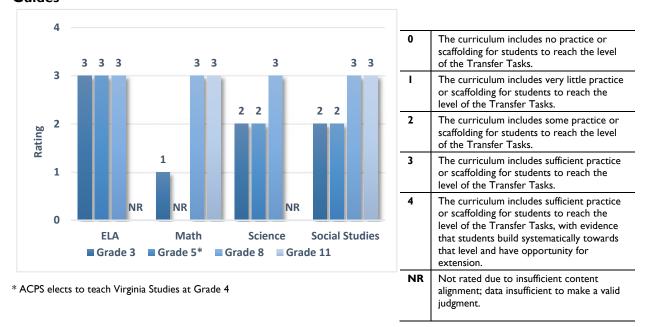
Alignment between the written curriculum and the Transfer Tasks is vital to the validity of the curriculum and assessment system in the division. Nearly all of the Transfer Tasks in ELA and social studies were closely aligned to the curriculum guides; the pre-assessment, activity ideas, and resources provide experiences that will lead to success on the Transfer Task.

In some cases, not all of the knowledge and skills required by the mathematics and science Transfer Tasks are emphasized in the corresponding curricular unit. For example, in Unit 2 of the Geometry course, the Transfer Task asks students to determine the number of triangles, whether they're obtuse or right angles, and the angle measurements of a figure. The unit emphasizes inequalities in triangles and finding relative angle sizes using the triangle inequality theorem—which is not directly aligned to the Transfer Task.

Criterion AET 2 describes whether the curriculum guides support students in reaching the cognitive demand required by the Transfer Task. Grade levels were Not Rated (NR) when there is not enough related content in the curriculum guides to make a fair judgment about cognitive demand. The curriculum guides for Grade 5 mathematics and high school ELA and science could not be evaluated for cognitive demand of the Transfer Tasks as compared to the curriculum due to insufficient evidence.

A rating of 4 (Excellent) was given to curriculum guides with evidence that students build systematically towards the cognitive level of the Transfer Task through scaffolded learning experiences that become increasingly more difficult; a rating of 4 also required that there be optional activities to extend students' learning beyond basic requirements, such as opportunities to publish their work. Curriculum Guides with a rating of 3 (Adequate) have sufficient practice or scaffolding for students to reach the cognitive level required by the Transfer Tasks, but they do not have evidence that students build systematically towards that level of cognition and have opportunities to advance their learning beyond the basic expectation through optional lesson extensions. Curriculum guides with a rating of 2 (Marginal) have some practice or scaffolding that support students achieving the cognitive level required by the Transfer Tasks, while a rating of I (Weak) means there is very little practice or scaffolding. Ratings are presented in Figure 8.

Figure 8. AET 2 Cognitive Demand of the Transfer Tasks compared to the Curriculum Guides

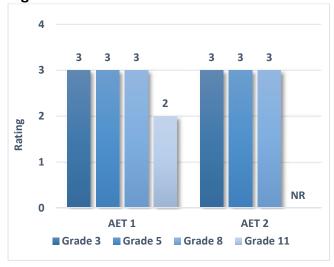


Overall, curriculum guides for ELA and for secondary grades in math, science, and social studies provided evidence that students are given adequate opportunity to meet the demands of the Transfer Tasks. However, elementary grades in math, science, and social studies were rated lower, as there were fewer introductory and practice activities to help scaffold learning for students.

ELA

The curriculum guide for ELA was reviewed for Grades 3, 5, 8, and 11 (American literature). In ELA, the curriculum guide is consistently rated a 3 (Adequate) across most criteria for Grades 3, 5, and 8. Grade 11 is the only grade level reviewed in which content in the curriculum was not aligned to the associated Transfer Task (AET 1). The Grade 11 Transfer Tasks were rated a 2 (Marginal) on the rubric because the curriculum guide does not explicitly show that students learn the specific skills leading to success with the Transfer Task. In Grade 11, only four of the eight units had Transfer Tasks available for review, and so this grade lacked enough evidence to be rated on AET 2. Ratings are shown in Figure 9.

Figure 9. AET I and AET 2 for ELA



AET I		
2	Most of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
3	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
AET 2		
3	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks.	
NR	Not rated due to insufficient content alignment; data insufficient to make a valid judgment.	

The ELA curriculum guide is commended for:

 Consistently supporting students in obtaining the knowledge and skills that are required by the Transfer Tasks. The guides typically provide students with opportunities to practice and build their skills.

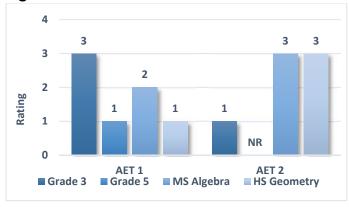
The ELA curriculum guide may be improved by considering the following recommendation:

• Complete development of Transfer Tasks. Some Transfer Tasks for Grade 11 ELA are currently missing. Adding Transfer Tasks for every unit in the 11th grade curriculum guide will improve the content alignment and system of assessment at that grade level.

Mathematics

The curriculum guide for mathematics was reviewed for Grades 3, 5, middle school Algebra 1, and high school Geometry. Grade 5 was not rated for cognitive demand of the Transfer Tasks compared to the curriculum (AET 2) because evidence of content alignment to VA SOLs was insufficient for a valid judgment. Ratings are shown in Figure 10.

Figure 10. AET I and AET 2 for Mathematics



AET	I	
I	Less than half of the knowledge and skills required by the transfer task are emphasized in the corresponding unit.	
2	Most of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
3	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
AET 2		
I	The curriculum includes very little practice or scaffolding for students to reach the level of the Transfer Tasks.	
3	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks.	
NR	Not rated due to insufficient content alignment; data insufficient to make a valid judgment.	

The mathematics curriculum guide is commended for:

- Content alignment between the curriculum and Transfer Tasks in Grade 3
- Degree of difficulty required by Transfer Tasks in secondary grades meets the level required by the curriculum.

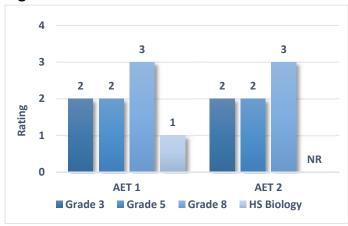
The mathematics curriculum guide may be improved by considering the following recommendations:

- Ensure direct alignment between unit content and Transfer Tasks. Lower ratings for AET I are primarily due to differences in the content that is the focus of the Transfer Tasks, as compared to the content that is the focus of the curriculum unit of study. For example, Unit I in Algebra I emphasizes adding and subtracting with decimals in a real world setting, but those skills are not required by the associated Transfer Task.
- Expand Transfer Tasks to address more than one VA SOL. Transfer Tasks should be reviewed to more often require students to evaluate real-life problems; moreover, Transfer Tasks should always integrate multiple VA SOLs addressed in the associated unit.

Science

The curriculum guide for science was reviewed for Grades 3, 5, 8, and high school biology. The curriculum guide for high school biology was not rated for cognitive demand (AET 2) due to a lack of evidence; not enough content was aligned to fairly rate the Transfer Tasks for this course. Ratings are shown in Figure 11.

Figure II. AET I and AET 2 for Science



AET I		
ı	Less than half of the knowledge and skills required by the transfer task are emphasized in the corresponding unit.	
2	Most of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
3	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.	
AET 2		
2	The curriculum includes some practice or scaffolding for students to reach the level of the Transfer Tasks.	
3	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks.	
NR	Not rated due to insufficient content alignment; data insufficient to make a valid judgment.	

The science curriculum guide is commended for:

- The Transfer Tasks in Grade 8 science were stronger than other grade levels, in terms of their content alignment to activities in the curriculum guide (AET I) and the degree of rigor they require as compared to the curriculum guide (AET 2).
- Transfer Tasks are engaging and multi-faceted; they provide scenarios that are enticing and relevant, encouraging students to apply their knowledge and skills to authentic situations. For example, the Transfer Task for Unit 3 in Grade 5 requires students to problem solve why cells might die during an interplanetary search for colonization.

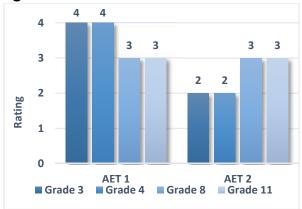
The science curriculum guide may be improved by considering the following recommendations:

- Expand Transfer Tasks to address more than one VA SOL. Transfer Tasks that do not currently address multiple VA SOLs should be expanded to assess more than one of the VA SOLs that are a focus of instruction in the corresponding unit.
- **Provide more scaffolding for Transfer Tasks**. The curriculum guide would benefit by increasing the amount of support and scaffolding for the particular knowledge and skills required by Transfer Tasks.

Social Studies

The curriculum guide for social studies was reviewed for Grades 3, 4 (Virginia Studies), 8 (Civics and Economics), and 11 (World History). Ratings are shown in Figure 12.

Figure 12. AET I and AET 2 for Social Studies



AET	AET I		
3	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.		
4	All of the knowledge and skills required by the transfer tasks are emphasized in the corresponding unit.		
AET 2			
2	The curriculum includes some practice or scaffolding for students to reach the level of the Transfer Tasks.		
3	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks.		

Overall the social studies curriculum guide earned high ratings, with most criteria scoring 3 (Adequate) or 4 (Excellent). The social studies curriculum guide is commended for:

• The Transfer Tasks are typically robust, addressing multiple VA SOLs and bringing a variety of skills together into creative tasks and real-world circumstances.

The social studies curriculum guide may be improved by considering the following recommendations:

- Provide more learning activities the reflect the required cognitive demand of Transfer Tasks at the elementary level. The degree to which the curriculum guide supports students in reaching the cognitive demand required by the Transfer Task (AET 2) was rated 2 (Marginal) in the elementary grades. Adding activities or lessons to the curriculum that provide students practice with the content aligned to the Transfer Tasks at higher levels of cognitive demand, including the "analysis," "evaluation," and "create" levels of the new Bloom's Taxonomy, will improve the AET 2 rating for Grades 3 and 4.
- Consider linking ELA standards to social studies Transfer Tasks. A few of the Transfer Tasks include writing opportunities and could provide performance data for both social studies and language arts. Although these tasks may not be tied directly to units of instruction in language arts, identifying the reading and writing SOLs required by those tasks will help align to the language arts expectations for the grade level and support the development of students' communication skills.

CHAPTER 5.TASK 3: DETERMINE THE EXTENT OF ALIGNMENT BETWEEN WRITTEN CURRICULUM AND TAUGHT CURRICULUM

Written and Taught Curriculum

Once content and assessments have been developed, instructional staff use the written and tested curriculum to guide their instruction. Within a well-aligned system, the taught curriculum is reflective of the written and tested curriculum. The purpose of Task 3 is to determine the extent to which the written curriculum including Transfer Tasks is aligned with the taught curriculum. To inform Task 3, McREL researchers conducted classroom observations and collected perceptual data through focus groups and surveys.

Commendations and Recommendations

McREL consultants and researchers noted aspects of alignment between the written and taught curriculum in ACPS that are commendable as well as aspects of that could be enhanced. For data to rise to the level of a commendation or recommendation, McREL consultants and researchers looked for intersections across data sources as well as the level of endorsement on a topic from survey items and focus groups. For example, if an instructional feature was observed in a majority of classes and this same topic was highly endorsed through surveys and focus groups, the topic was considered noteworthy. Additionally, if an instructional feature was seldom observed during classroom observations and was not highly endorsed through surveys or focus groups, the topic was noted as a possible recommendation. Commendations and recommendations are noted below.

Commendations

- At all education levels, teachers addressed at least one lesson learning goal/objective submitted to McREL researchers prior to class. The lesson learning objectives were in alignment with course content (e.g., Grade 3 mathematics, Biology) and often cited the Virginia Standard of Learning that was addressed during instruction.
- In focus groups, teachers and administrators reported the greatest strength of the ACPS written
 curriculum is the continuity across the division and the integration of technology. Teachers also
 indicated numerous benefits of the ACPS written curriculum to support their implementation
 including the integration of the essential questions to provide guidance and direction, identification
 of key vocabulary for lesson plan development, and providing an overview of units allowing the
 teacher to quickly review the unit content.
- Overall, parent perceptions of student learning at ACPS are positive with parents of elementary students having the most positive perceptions. Most parents of ACPS students had higher levels of endorsement for survey items related to ACPS teaching their child(ren) essential skills over ACPS preparing their child(ren) for the future after graduating from high school.

Recommendations

• Complete development of all curriculum guides. In staff surveys, findings suggest staff perceive the ACPS written curriculum as somewhat complete for their education level and/or content area. This finding was confirmed by McREL content analysts during the review of selected written curriculum guides as components of some guides, particularly high school guides, were incomplete.

- Revise the ACPS curriculum guides to enhance functional use. Teachers indicated that the use of Blackboard provides easy access to the curriculum guides, but the current structure makes the guides cumbersome to use. In focus groups and surveys, teachers and administrators reported that teachers often supplement the ACPS written curriculum and opt to use online search engines to locate instructional resources rather than scroll through the curriculum guides. Teachers suggested integrating more streamlined, functional, and updated resources into the ACPS written curriculum.
- Utilize the expertise of ACPS teachers to determine the most useful resources for instruction for all students. Although findings suggest that input from teachers was incorporated as curriculum guides were developed, focus group participants recommend further leveraging teacher expertise particularly to augment resources for special student populations. Both teachers and administrators report that incorporating teachers more directly during the curriculum development process would enhance the usability of the written curriculum. Teachers might submit sample lesson activities, identify useful links, and/or offer suggestions on how to more effectively engage all students during instruction.

Findings

Classroom Observations

McREL established the schedule of classroom observations to include 47 elementary observations, 31 middle school observations, and 26 high school observations. After the classroom observation schedule was set, selected teachers were notified of upcoming observations by the ACPS school-based audit coordinator. The coordinator discussed the purpose of the observations with teachers and asked teachers to respond to a set of questions about their lesson and class so that researchers would better understand the class context and planned lesson content. These questions included:

- What are the learning goal(s) and/or objective(s) for today's lesson?
- Are you using any student assessments today? If yes, what are they?
- What resources are you using to address the learning goals/objectives?
- In preparing for this lesson, how did you accommodate the range of student needs/skill levels in your class?
- Are there contextual elements about this class that would help the observer better understand the lesson structure?

Responses to these questions provided insight about the alignment between the taught curriculum and ACPS written curriculum, and—although class observations included only a portion of the lesson (20–30 minutes)—observers were able to document connections between the teachers' plan for the lesson and how the lesson was implemented. For example, a majority of teachers across all education levels identified learning objectives that reflect ACPS written curriculum content and in multiple cases teachers noted the VA SOLs that were the focus for instruction. McREL researchers documented that at least 83% of teachers across all education levels enacted at least one planned lesson objective during the observations. Figure 13 displays the results.

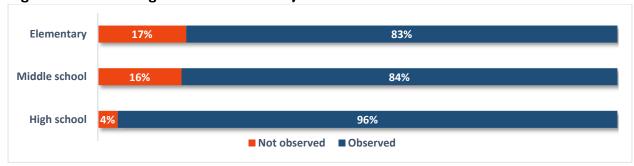


Figure 13. Addressing Planned Lesson Objectives

When asked about the use of student assessments during the lesson, teachers across education levels planned to use a variety of strategies to assess student progress toward learning objectives. Such strategies included the use of warm-up questions, exit tickets, quick quizzes, informal conversations with students, self-checking technology, learning logs, self- and peer-assessment activities, KWL (Know, Want to Know, Learned) charts, summaries, and other techniques. These activities are reflective of the formative assessment recommendations presented in the written curriculum guides reviewed by McREL content analysts.

ACPS teachers identified a variety of resources to support their instruction. At the elementary level, teachers most often cited resources associated with textbooks such as learning guides, interactive notebooks, and the student textbook, followed by references to videos from Brain Pop® (reading temperature in math, classification in science), a United Streaming video on the Civil War, and a video designed to help students understand how to provide helpful feedback to peers (Austin's Butterfly). Tactile resources such as base-ten blocks, analog clocks, materials from the Delta Education FOSS kit (Earth Materials), and primary resource pictures (Civil War era) were identified, as well as online resources including Destination Math, Beacon Learning Center, Google Classroom, and a VA SOL style quiz (Quia). Additionally, referenced reading resources included *Island of the Blue Dolphins* (Scott Odell), *The Story of Ruby Bridges* (Robert Cole), and *Declaration of Independence* (Terry Hicks), as well as vocabulary resources such as cards and matching activities.

The middle school resources most often referenced included Virginia Standards of Learning test preparation materials, student textbooks, and teacher-created materials. Test preparation materials included Virginia Department of Education writing prompts and rubrics, a released VA SOLs multiple choice writing test, test-prep packets, and the VA SOLs Coach Writing book. Teacher-created materials included PowerPoints for content introduction and note-taking, and textbook-associated materials such as interactive notes/animations on Think Central. Other referenced resources included graphing calculators (math), Brain Pop® videos (science), Bill Nye DVD and questions (science), and unit vocabulary (English language arts). When asked about class contextual elements that would help the observer better understand the lesson structure, middle ELA teachers indicated that the Virginia Standards of Learning test would occur in approximately three weeks, which may suggest why VA SOLs test prep materials were referenced on these pre-observation questionnaires. Both middle school ELA and science teachers referenced SOL prep materials.

High school resources were varied with referenced materials associated with course textbooks (such as interactive notebooks and worksheets), VA SOLs released test items and prompts, lesson materials from the Virginia Department of Education Enhanced Scope and Sequence documents, and Stanford University's "Reading Like a Historian" lesson. Teachers also referenced the use of technology (Chromebooks, graphing calculators) and online resources such as Kahoot for an anticipation guide and a quiz, biology cell animations from John Kyrk, Brain Pop® videos, Google Classroom, ED Puzzle, and

Kahn Academy videos. Software programs such as Netlogo and Geometer's Sketchpad were referenced as well as student-developed DNA models. Teachers also referenced teacher-developed materials such as PowerPoints and graphic organizers.

When asked how teachers accommodated the range of student needs/skill levels, elementary teachers indicated they incorporate activities with varying learning styles such as kinesthetic activities and visual materials as well as printed resources. Teachers also noted they intentionally paired students, modified assignments, provided additional instruction in small groups, used teacher-prepared notes and a word bank, and incorporated explicit vocabulary instruction. Student reading levels were also referenced as a way to differentiate instruction. When asked about the class contextual elements that would help the observer better understand lesson structure, elementary teachers most often referenced the diversity of students in their classes. Many classes included students that were English-language learners, special education students, and/or talented and gifted students.

Middle school teachers indicated data gleaned through pre-assessments were used to accommodate the range of student needs and skill levels. Middle school teachers also referenced student Lexile scores, English-language learner assessments, and a city-wide benchmark test (math) as data for determining student needs. Additionally, teachers indicated they followed student individual education plans (IEPs), used tiered learning modalities, conferenced with individual students, scaffolded their lesson plans, and used interactive notes.

At the high school level, multiple teachers addressed the need to support students who were English-language learners. Teachers indicated they used flexible grouping strategies and when possible incorporated heterogeneous grouping to promote communication in English while providing native language support. As with elementary and middle school teachers, high school teachers referenced the use of various learning modalities, intentional pairing of students, scaffolding assignments, graphic organizers, vocabulary support, and structured note taking. One teacher also indicated there was direct support from a special education teacher for students in the class. When asked about the class contextual elements that would be important for the McREL observer to understand, high school teachers most often referenced the diversity of student readiness levels and the number of English-language learners or special education students in the class. They also referenced the upcoming Virginia Standards of Learning tests.

Classroom observations provided evidence to endorse the statements made by ACPS teachers on the pre-observation questionnaire. In 92% of elementary classroom observations, teachers planned for a variety of student learning needs and in 83% of observations, elementary teachers adjusted instruction for students during the lesson. At the middle school, teachers planned for a variety of student learning needs in 71% of classroom observations, and adjusted instruction for students during the lesson in 74% of the observations. At the high school level, researchers noted evidence indicating that teachers planned for a variety of student learning needs and adjusted instruction for students during the class in 85% of the observations. (See results in Task 4.)

With regard to the use of assessments, teachers across all education levels reported planning to use a variety of informal assessment strategies during their lessons and—in some cases—formative assessment data was provided to students as feedback. Elementary teachers provided formative assessment feedback to students in 32% of observations, middle school teachers provided assessment feedback to students in 45% of observations, and high school teachers provided formative assessment data as feedback to students in 65% of the observations. (See results in Task 4.)

The pre-observation questionnaire also provided insights regarding the level of cognitive complexity of student tasks implemented during classroom observations. The most cognitively complex student tasks that were noted during classroom observations were Level 3 tasks. Level 3 tasks call for deep knowledge, and require students to connect ideas, make generalizations, analyze and describe characteristics, and/or perform multi-step problem solving. McREL researchers noted that 53% of student tasks at the elementary grades were at Level 3, with 19% of level 3 tasks at the middle school, and 35% of Level 3 tasks at the high school. This might be associated with preparation for VA SOLs testing at the secondary level. At the elementary level, one teacher included a resource that provided VA SOLs style quiz questions while multiple middle school and high school teachers planned lessons designed to help students prepare for VA SOLs testing. (See results in Task 5.)

Focus Groups

Numerous teacher, student, and administrator focus group questions aligned with Task 3—for instance, teacher focus group questions related to how the ACPS written curriculum meets the needs of teachers, the strengths of the ACPS written curriculum, and suggested changes to the ACPS written curriculum are aligned with Task 3. In a similar vein, student focus group questions related to Task 3 include items about learning goals, personal progress monitoring towards learning goals, and revisions of their work. Administrator focus group questions related to Task 3 are about how the ACPS written curriculum meets the needs of teachers, the benefits of the ACPS written curriculum, and suggested changes to the ACPS written curriculum.

Teacher

As indicated above, McREL researchers conducted seven teacher focus groups with a total of 79 teachers at the elementary, middle school, and high school levels. Teachers talked about 1) how they use the written curriculum to support lesson development and instruction, 2) supplementing and implementing the ACPS written curriculum, 3) strengths of the ACPS written curriculum, and 4) suggested changes to the ACPS written curriculum.

Using the Written Curriculum

When teachers were asked how often they use the ACPS written curriculum to guide lesson development and instruction, they reported utilizing the ACPS written curriculum to varying degrees—ranging from daily use of the written curriculum in guiding lesson development and instruction to little or no use of the curriculum at all. Teachers who reported frequent use of the ACPS written curriculum indicated they believe it is a useful tool for organizing and tracking specific course content that needs to be taught to students, serving as a general blueprint for developing units and planning instruction. They also indicated routinely utilizing the ACPS written curriculum in their schools as a means of ensuring alignment between course content and the VA SOLs. This perspective was predominantly shared by educators at the elementary level, though these teachers did share that they feel the alignment between the ACPS written curriculum and VA SOLs varies by subject area (e.g., interviewees indicated that they feel the ACPS written curriculum is more aligned with VA SOLs for mathematics and science classes than for reading and English classes).

In contrast, teachers who reported using the ACPS written curriculum infrequently or not at all offered less positive statements, with several teachers characterizing the ACPS written curriculum as "frustrating" and "terrible." Teachers were particularly critical of the ACPS written curriculum's pacing and Transfer Tasks. They described the pacing in the ACPS written curriculum as unrealistic and disorganized, reporting that it requires "backtracking" in order to fill resulting knowledge and skills gaps.

"I would say that the curriculum and what we need to teach is very clear, but I don't think the pacing is always realistic with what we're going to get within the timeframe," commented a teacher.

Teachers were similarly critical of the Transfer Tasks included in the ACPS written curriculum, citing issues with functionality as well as with the tasks themselves. "Some of the pieces are not functional. You go to the website, and it doesn't work," explained a teacher. Another teacher commented, "They're not real world applications, but they're supposed to be. There's no meat to them." Teachers communicated it is critical that Transfer Tasks be reevaluated and revised to ensure both relevance and functionality, if teachers are expected to consistently utilize them as resources.

Supplementing the Written Curriculum

Teachers were asked if they supplement the ACPS written curriculum with other resources, why they supplement it, and what resources they use to supplement. Teachers reported frequently supplementing the ACPS written curriculum regardless of whether they used the ACPS written curriculum frequently or infrequently, with many teachers describing the ACPS written curriculum as incomplete or having gaps. Teachers indicated that while the ACPS curriculum identifies important content knowledge and skills to teach students, the specific tools and resources provided to support implementation of that knowledge and those skills are largely inaccessible due to disorganization or lack of functionality. Teachers explained that they are frequently required to look at external resources outside of the ACPS written curriculum as a result of resources either being omitted or inaccessible due to technical difficulties. "Some of the links don't connect to anything," commented one teacher. "Dead links are always a problem. It's not very user-friendly."

Teachers provided numerous examples of the external resources that they use to supplement the ACPS written curriculum, including resources such as Teacher Pay Teacher, Study Island, Khan Academy, School Net, and Henrico County's online database. Several teachers shared they develop their own resources, as well.

Implementing the Written Curriculum

When teachers were asked about implementing the ACPS written curriculum, they reported different challenges and successes. The reported successes include general guidance and direction provided by the curriculum's essential questions and the ability of instructors to chart their progress through the units included in the ACPS written curriculum. Teachers described the key vocabulary and terminology identified by the ACPS written curriculum as particularly useful in lesson development and praised the extent to which the curriculum guide provides an overview for course units and the content therein, allowing new teachers to quickly learn what needs to be done in a given class as well as track their progression through its units. The reported challenges include determining which standards are going to be tested by assessments (e.g., division standards or VA SOLs), flawed pacing and sequencing, a lack of alignment between division and state standards, a lack of alignment between assessments and course content, insufficient scaffolding and leveling to meet the needs of special student populations, and the frequently tedious and contrived nature of unit Transfer Tasks.

When asked to suggest specific aspects of the ACPS written curriculum that could be improved, teachers offered numerous recommendations. Suggestions included modifications of curriculum sequence and pacing to ensure consistent and steady progression of content and eliminate gaps; reexamination and adjustment of unit Transfer Tasks to ensure alignment with standards and course content; and implementing changes to make the ACPS written curriculum guide more easily accessible, up to date, functional, and user-friendly.

Greatest Strength of the Written Curriculum

Teachers were asked their thoughts about the greatest strengths of the written curriculum. Reported strengths included technology integration and the presence of continuity in curriculum across the division. Teachers also cited the amount of resources as a strength of the ACPS written curriculum.

Change with the Greatest Impact to the Written Curriculum

Teachers were asked about one change they believe would have the greatest positive impact to the written curriculum. Teachers offered numerous suggestions to revise the ACPS written curriculum. Suggestions included: making benchmark data from previous grades accessible to students' current instructors; ensuring alignment between course content, assessments, and the VA SOLs; a re-evaluation of curriculum pacing to represent more realistic timetables; more professional development opportunities for teachers; the integration of more streamlined, functional, and up-to-date resources; and an incorporation of more appropriate and differentiated scaffolding for special student populations.

Additional Comments

Teachers were invited to provide additional comments or feedback about the written curriculum. Comments included a reiteration of the need for appropriate differentiated scaffolding to better support the needs of special student populations; an emphasis of the importance of allowing teachers to teach and not forcing them to adhere strictly to a structured curriculum guide; and a reiteration of the need for more up-to-date, streamlined, and functional curriculum resources. Further, teachers expressed they appreciated the opportunity to talk about and reflect on their implementation of and experiences with the ACPS written curriculum.

Administrator

McREL researchers conducted two administrator focus groups consisting of 17 participants. Eleven of the 17 participants (64.7%) were either elementary principals or assistant principals. During these focus groups, participants discussed 1) accessing the curriculum guides, 2) supplementing and implementing the written curriculum, 3) utilizing the ACPS-developed benchmark assessments, 4) strengths and challenges of the ACPS written curriculum, and 5) suggested changes to the ACPS written curriculum.

Accessing Curriculum Guides

Administrators were asked if teachers have access to complete curriculum guides for the subjects and/or courses that they teach. Administrators felt that teachers had access to the curriculum guides for the course(s) they taught. However, they explained that teachers limit their access as they often feel overwhelmed by the ACPS written curriculum. As one administrator explained, "Access and availability are not issues, but it's interesting, because there is also way too much." Another administrator captured this theme by saying "I think our curriculum looks compact, but it's very deep and it requires time. That's not something that people have, especially a new teacher."

While administrators believed that the written curriculum and associated materials are comprehensive, the sheer amount of content is challenging to fully explore. "Curriculum guides across the board are overwhelming to teachers. They almost have too many resources and teachers don't know which ones will give them the biggest bang for their buck."

Because many teachers feel overwhelmed, it is not uncommon to see teachers using self-developed materials. As one administrator explained, "The question is, 'do you have the time to search each of those easily accessible hyperlinks to figure out which one best fits what you're going to do?" So I think our curriculum looks compact, but it's very deep and it requires time."

Administrators suggested that teachers might feel less overwhelmed by the written curriculum if they had enough time to explore the materials. Further, streamlining the written curriculum would also help, so that teachers could have immediate access to the most vital information and then could dig down into the more expansive material at a later time.

Supplementing the Written Curriculum

Administrators were asked the extent to which teachers supplement the written curriculum. Administrators explained that teachers did frequently supplement the written curriculum, noting that teachers supplemented with self-developed materials, online resources, and materials from colleagues. Administrators also indicated that teachers would supplement for English-language learner (ELL) classes or higher level, non-SOL classes. One administrator described that teachers "... have the curriculum and of course they have to follow the curriculum but we need to create our own materials so we can kind of adjust the curriculum to the needs of our ... program." This theme was supported by several other administrators who felt that ELL classes often require a great deal of modification and supplementation.

In regard to secondary level or non-SOL classes (i.e., bilingual language, Grade 12 social studies), teachers spend a great deal of personal time creating supplemental materials for these classes, as ACPS does not offer curriculum resources for these classes. More ACPS materials would help offset the amount of personal time teachers spend developing these courses. As one administrator stated, "Our teachers are certainly resourceful in that if they don't have immediately available those state and local resources, they'll get them." Yet, the search for resources comes at the cost of teachers' personal time.

Administrators did explain that teachers who taught SOL classes ended up supplementing the least, when compared to non-SOL classes. One administrator captured this idea by saying,

So, I oversee math and science and my math and science courses that have SOLs have far more resources both at the state and local level than courses that don't. So my one take away would be to just really talk about increasing resources for courses that are still very important that are not measured by the state assessment.

While many administrators did mention that the resources added to the overwhelming nature of the written curriculum, the offered resources were viewed as comprehensive. One administrator mentioned, "It is rich. I mean the counterpoint to it being overwhelming is that there are more resources than we could ever use. No one can say they don't have places to go for more resources."

Implementing the Written Curriculum

Administrators were asked about the level of implementation of the written curriculum at their schools. Administrators reported wide variation in the implementation of the written curriculum among teachers. Administrators explained that this variation is the result of giving teachers the discretion to implement the curriculum as needed; the perception is that some teachers feel they already have everything they need to effectively teach their classes while other teachers feel overwhelmed and just pick curriculum pieces that fit immediate needs. As one participant explained,

Many teachers feel that they've had the autonomy to choose what resources and what they're going to be teaching. And I think that it's important that central office take the lead and say that, you know, everybody is going to be using the curriculum and here's the minimum expectation for that.

When implementing the curriculum, however, the largest barrier to implementation is related to the size and scope of what is offered through ACPS. Administrators found that teachers would pick and choose elements from the curriculum to integrate into classroom instruction. One administrator explained "I think they look at trends from past years and what the kids need to go to the next grade and I think there's times when they have to prioritize." Another participant explained "my teachers have to weed out what's not viable, what's viable, what is the big rock, what's going to get us to the quickest place most effectively."

Another administrator described how teachers get lost in the redundancy of the curriculum. He explained,

And with that they're [the curriculum guides] so highly repetitive I think it's very easy for the teachers to say, 'Oh, there's so much here. I'm just going to put this aside and I'll do what I can figure out on my own,' because they're so lengthy and repetitive with the same lengths, the same descriptions copied, cut and pasted repetitively.

When teachers do implement the written curriculum, administrators explained that they often tailored it to their individual instructional practices. For example, one participant stated,

So some of the teachers will appropriately use different parts of Math Expressions to kind of align it to their curriculum and depending on the years of experience the teacher has, some folks are better at that than others and that's a challenge I think we all see.

Utilizing ACPS-Developed Assessments

Administrators were asked about the ACPS-developed assessments, specifically the benchmark assessments developed by ACPS, facilitating teachers' ability to identify student learning needs. In general, participants felt that the ACPS-developed assessments could be more helpful. In particular, administrators, like teachers, felt that the pacing related to the benchmark assessments was too fast, the ordering of the curriculum did not match the benchmark assessments, and the benchmark assessments were not aligned to the SOLs.

In regard to pacing, administrators felt that the ACPS-developed benchmark assessments were based upon an extremely difficult pacing schedule that often frustrated teachers. One participant went on to say "The assessments are built on the assumption that a certain amount of material is covered and sequence is followed. So when we take an assessment at the midpoint of the year and the units we taught don't match up with those to be assessed, the data are not really useful."

The ordering of the curriculum materials also did not appear to align with the ACPS-developed benchmark assessments. Many of the administrators felt a different organization would be useful. As one administrator explained, "Some of it wasn't sequenced, like some things that you needed to have in order to make sequential sense were out of order."

In regard to alignment to the SOL, administrators explained that the ACPS-developed benchmark assessments need improvement. "You know thinking back to the curriculum guide, it does not go to looking at that idea of power standards, like what are the most important to actually truly cover everything in the whole K-5 SOLs," one participant explained. This causes added stress when teachers are trying to meet the SOL objectives while also trying to cover material that will appear on benchmark assessments.

Greatest Strength of the Written Curriculum

Administrators were asked their thoughts about the greatest strength of the written curriculum. Administrators felt the curriculum's greatest strengths were accessibility, depth of content, and consistency. Administrators felt teachers had access to the ACPS curriculum; since materials are available electronically, and all teachers have laptops, access to the curriculum was perceived as a strong suit. As one administrator stated "... it's highly accessible." Another participant explained "No one can say they don't have places to go for more resources." Administrators also pointed to the depth of content in the written curriculum as a strong suit. Because so much is made available in regard to the written curriculum and associated materials, most teachers are not lacking what they need for their

subject areas. Administrators also explained that the curriculum is consistent, which was viewed as a strong suit. As one participant explained "Especially the format is easy to follow. Whether the materials are clear or not is a different thing but the format is consistent."

Biggest Challenge to Implement the Written Curriculum

Administrators were asked their thoughts about the greatest challenge to implementing the written curriculum. Administrators honed in on the size and scope of the written curriculum. In particular, administrators explained that the written curriculum and associated materials can be overwhelming to teachers, especially newer teachers. One administrator captured this concept in saying "I think the amount of content doesn't necessarily match the amount of time we have to do it." Another administrator explained she often hears teachers discuss how overwhelming the curriculum guides and materials can be, which creates a barrier to implementation.

Change with the Greatest Impact to the Written Curriculum

Administrators were asked about one change they believe would have the greatest positive impact to the written curriculum. Administrators explained getting input from teachers regarding curriculum changes would have the greatest impact on the written curriculum. Administrators felt ACPS curriculum staff should spend more time in ACPS schools to gain an understating of how the curriculum is being used and what could be changed to meet the needs of teachers and students. Overall, administrators felt if educators were involved in creating and modifying the written curriculum, many issues would be addressed before new versions of the written curriculum were launched.

Additional Comments

Administrators were invited to provide additional comments or feedback about the written curriculum. Administrators touched on the curriculum's appropriateness for students in ACPS schools. Administrators talked about the ACPS Transfer Tasks. In particular, administrators discussed that—in theory Transfer Tasks are great—but that issues related to time and appropriateness for students make them difficult to implement. One administrator explained "Many of them have been modified and teachers have appreciated that but I still sense that many teachers hold them at arm's distance." Another administrator explained "I really love the fact that the kids can get their hands dirty with the work and the knowledge that they have and be able to apply it in a meaningful, realistic way." In general, however, administrators felt that there is not enough time to implement the Transfer Tasks well.

Surveys

A number of staff survey items aligned with Task 3. Staff survey items included questions about the extent to which ACPS written curriculum is complete, how ACPS staff use the written curriculum, the perceived strengths of the written curriculum, and recommendations for improving the written curriculum.

Staff

As previously indicated, 547 staff across ACPS responded to the survey. Over half of the respondents represented the elementary educational level with elementary classroom teachers representing 31% of the total number of ACPS respondents. Further, respondents only completed survey items related to their ACPS position, so not every position answered all survey items. As with the classroom observation results, survey results are provided by education level.

Elementary

In regard to staff perceptions of alignment between the ACPS written and taught curriculum, Figure 14 presents results for staff at the elementary level. Please note that only classroom teachers, content specialists, and instructional coaches completed these survey items. Classroom teachers, content specialists, and instructional coaches endorsed the ACPS written curriculum at moderate levels in relation to being complete for the courses they teach (60% and 46%), being helpful in effectively teaching the VA SOLs (62% and 45%), and being their primary resource for lesson development and instruction (49% and 40%). Classroom teachers, content specialists, and instructional coaches highly endorsed the question related to the ACPS written curriculum needing to be supplemented with other resources or activities to meet the VA SOLs (92% and 97%, respectively).

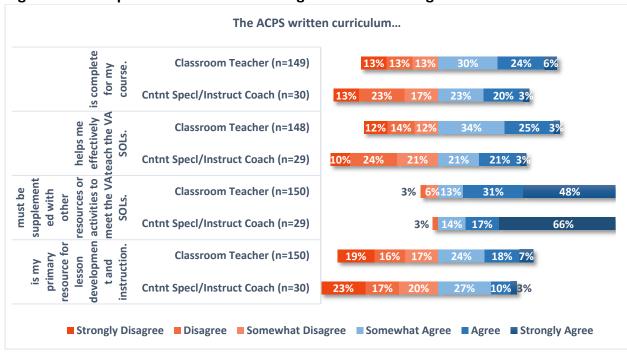


Figure 14. Perceptions of Written and Taught Curriculum Alignment

Classroom teachers were asked about how often they used the written curriculum as their primary resource. The most frequently selected response was *Sometimes* (34%). The response selected the least was *Never* (12%). These findings can be reviewed in Figure 15.

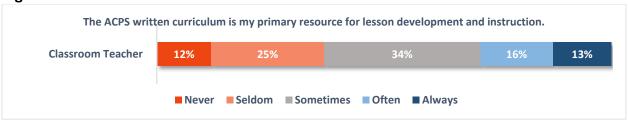


Figure 15. Use of the Written Curriculum: n=155

All school staff were asked about whether the curriculum was easy to use. Classroom teachers had the lowest endorsement (40%) while school administrators had the highest (70%) endorsement to this question. The positions of those that selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and

school improvement coach; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 16.

The ACPS written curriculum... Classroom Teacher (n=151) ELL Teacher (n=32) 22% is easy to use. Special Ed. Teacher (n=15) 20% 7% 13% 13% Cntnt Speci/Instruct Coach (n=38) 3% 3% 21% Administrator (n=17) 29% 18% Other (n=13) 46% 8% 15% ■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree

Figure 16. Perceptions of Ease of Use

Only administrators were asked, "What is the level of implementation of the ACPS written curriculum in your school?" Elementary administrators most often (65%) selected the option of Fully Implemented. The response option selected the least among elementary administrators (12%) was Not Implemented. These findings can be reviewed in Figure 17.

Figure 17. Perceptions of the Level of Schoolwide Implementation, Elementary Administrators: n=17



All school staff were asked about whether the ACPS written curriculum supports assessment of student progress towards meeting the VA SOLs. Content specialists, instructional coaches, and classroom teachers had the lowest endorsement (40% and 41%) while administrators had the highest (76%) endorsement. The positions of those that selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 18.

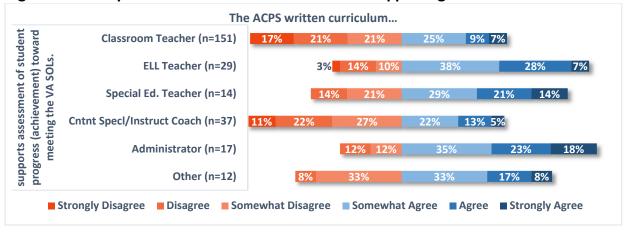


Figure 18. Perceptions of ACPS Written Curriculum Supporting Assessment

All ACPS staff positions responded to the question "Do ACPS-developed assessments provide data that are useful for guiding your instruction or decision-making?" At the elementary level, staff most frequently selected the response option of *Somewhat*, ranging from 32% to 82%. The least frequently used response option for the elementary level was Yes, ranging from 3% to 41%. Administrators (41%) and ELL teachers (18%) reported the ACPS-developed assessments provides the data useful to them for guiding instruction and decision-making. These findings can be reviewed in Figure 19.

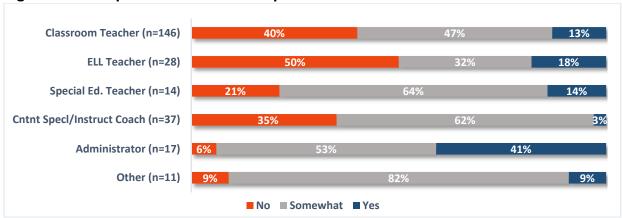


Figure 19. Perceptions of ACPS-Developed Assessments

Middle School

In regard to staff perceptions of alignment between the ACPS written and taught curriculum, Figure 20 presents results for staff at the middle school level. Please note that only classroom teachers, content specialists, and instructional coaches completed these survey items. However, due to a small sample size, results for content specialists and instructional coaches were suppressed. Classroom teachers endorsed the ACPS written curriculum at moderate levels in relation to being complete for the courses they teach (50%), being helpful in effectively teaching the VA SOLs (49%), and being their primary resource for lesson development and instruction (38%). There was high level of endorsement from classroom teachers to the question related to the ACPS written curriculum needing to be supplemented with other resources or activities to meet the VA SOLs (90%).

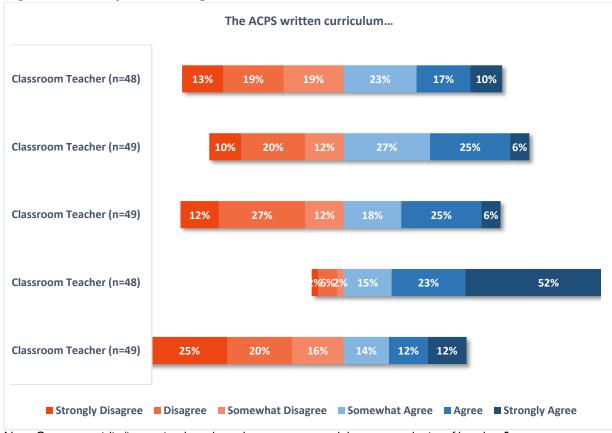


Figure 20. Perceptions of Alignment

Note. Content specialist/instructional coach results are not reported due to a sample size of less than 5.

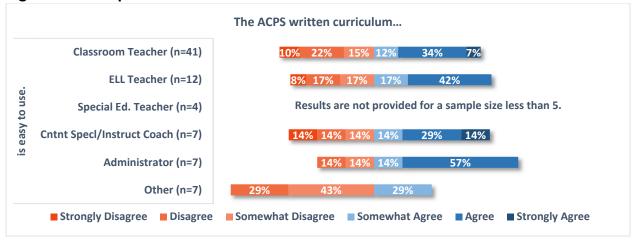
Classroom teachers at the middle school level reported greater usage of the written curriculum than elementary teachers in selecting *Often* most frequently. The response option used the least was *Seldom*. These findings can be reviewed in Figure 21.



Figure 21. Use of the Written Curriculum: n=49

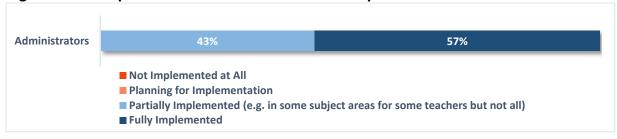
All school staff were asked about whether the curriculum was easy to use. Those that selected "other" for their position had the lowest endorsement (29%) while school administrators had the highest (71%) endorsement. The positions of those that selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 22.

Figure 22. Perceptions of Ease of Use



Only administrators were asked, "What is the level of implementation of the ACPS written curriculum in your school?" Middle school administrators most often (57%) selected the option of *Fully Implemented*. The only other option selected among administrators at the middle school level was *Partially Implemented* at 43%. These findings can be reviewed in Figure 23.

Figure 23. Perceptions of the Level of Schoolwide Implementation: n=7



All school staff were asked about whether the ACPS written curriculum supports assessment of student progress towards meeting the VA SOLs. ELL teachers had the lowest endorsement (45%) while those that selected "other" for their position had the highest (83%) endorsement. The positions of those that selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 24.

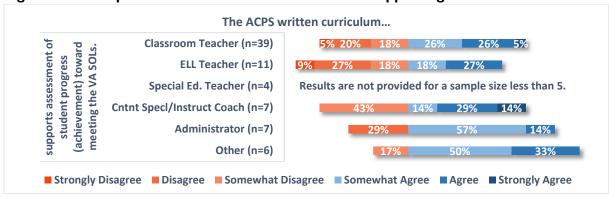


Figure 24. Perceptions of ACPS Written Curriculum Supporting Assessment

All ACPS staff positions responded to the question "Do ACPS-developed assessments provide data that are useful for guiding your instruction or decision-making?" ACPS staff most frequently selected the response option of *Somewhat*, ranging from 33% to 100%. The least frequently used response option for the elementary level was Yes, ranging from 11% to 33%. ELL teachers (33%) and classroom teachers (11%) reported the ACPS-developed assessments provide the data useful to them for guiding instruction and decision-making. These findings can be reviewed in Figure 25.

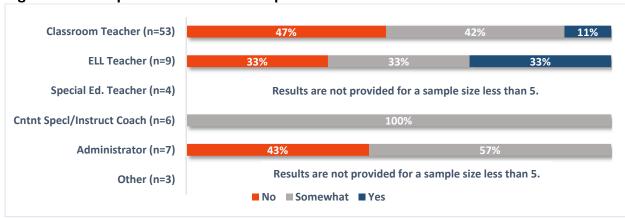


Figure 25. Perceptions of ACPS-Developed Assessments

High School

In regard to staff perceptions of alignment between the ACPS written and taught curriculum, Figure 26 presents results for staff at the high school level. Please note that only classroom teachers, content specialists, and instructional coaches completed these survey items. However, due to a small sample size, results for content specialists and instructional coaches are not provided. Classroom teachers endorsed the ACPS written curriculum at moderate to high levels in relation to being complete for the courses they teach (73%), being helpful in effectively teaching the VA SOLs (70%), and being their primary resource for lesson development and instruction (44%). As with middle school classroom teachers, there was high level of endorsement from classroom teachers to the question related to the ACPS written curriculum needing to be supplemented with other resources or activities to meet the VA SOLs (89%).

The ACPS written curriculum... Classroom Teacher (n=67) 34% 24% Classroom Teacher (n=69) 20% 10% 23% Classroom Teacher (n=68) 13% 21% 27% Classroom Teacher (n=66) 36% 38% Classroom Teacher (n=71) 25% 20% 20% 10% ■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Strongly Agree

Figure 26. Perceptions of Alignment

Note. Content specialist/instructional coach results are not reported due to a sample size of less than 5.

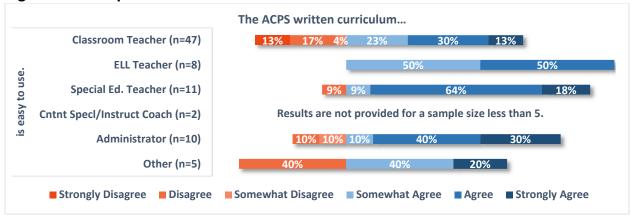
High school classroom teachers reported that they *Never* (25%) or *Seldom* (25%) use the written curriculum as their primary resource. Inversely, the response option of *Always* (8%) was used the least. These results are presented in Figure 27.



Figure 27. Use of the Written Curriculum: n=74

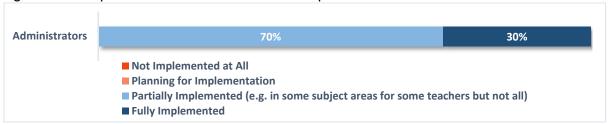
All school staff were asked about whether the curriculum was easy to use. Those who selected "other" as their job title had the lowest endorsement (60%) while ELL and special education teachers had the highest (100% and 91%, respectively) endorsement of the question. The positions of those that selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 28.

Figure 28. Perceptions of Ease of Use



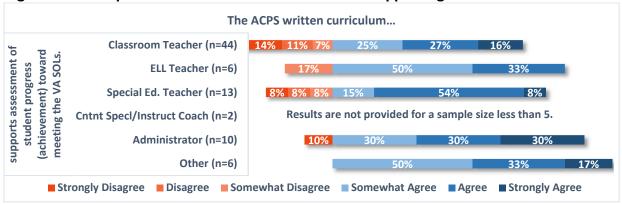
Only administrators were asked, "What is the level of implementation of the ACPS written curriculum in your school?" High school administrators most often selected the option of *Partially Implemented* (70%). The only other option selected among administrators at the high school level was *Fully Implemented* at 30%. These findings can be reviewed in Figure 29.

Figure 29. Perceptions of the Level of Schoolwide Implementation: n=10



All school staff were asked about whether the ACPS written curriculum supports assessment of student progress towards meeting the VA SOLs. Classroom teachers had the lowest endorsement (68%) while those who selected "other" and administrators had the highest endorsement (100% and 90%, respectively). The positions of those that selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 30.

Figure 30. Perceptions of ACPS Written Curriculum Supporting Assessment



All ACPS staff positions responded to the question, "Do ACPS-developed assessments provide data that are useful for guiding your instruction or decision-making?" ACPS staff most frequently selected the response option of *Somewhat*, ranging from 33% to 80%. The least frequently used response option for the high school level was Yes, ranging from 10% to 33%. Those who selected "other" for their job title (33%) and special education teachers (30%) reported the ACPS-developed assessments provides the data useful to them for guiding instruction and decision-making. These findings can be reviewed in Figure 31.

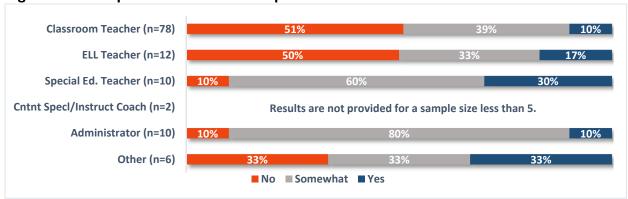


Figure 31. Perceptions of ACPS-Developed Assessments

Open-Ended Questions

ACPS staff were asked to provide comments related to the greatest strength of the ACPS written curriculum, the biggest challenge to implementing the ACPS written curriculum, the one change that would have the greatest positive impact to the ACPS written curriculum moving forward, and any additional comments that they would like to add about the ACPS written curriculum. At times the comments from staff are contradictory, and it may be necessary to continue discussions with staff to resolve these differences.

Greatest Strength of the ACPS Written Curriculum

Seven themes emerged as the greatest strengths of the ACPS written curriculum. They include: alignment to the VA SOLs, ease of accessibility and use, resources, organization of the materials, essential questions and Transfer Tasks, the curriculum as a pacing guide, and the backwards planning model. Each theme is described in more depth below.

Alignment to the VA SOLs. Staff members appreciated that in many instances the units with the ACPS written curriculum are clearly aligned to the VA SOLs. They agreed that because they were involved in writing the written curriculum, it continues to be a living document. New teachers especially found the curriculum guides to be useful. As one staff member said, "The standards are unpacked and made clear," and another commented, "The greatest strength of the curriculum is providing a framework for teachers to know what to teach."

Ease of accessibility and use. Staff regarded the availability and accessibility of the written curriculum as a strength. Some staff mentioned that the curriculum is easy to maneuver and follow. It also helps them lead their instruction. The online availability of the curriculum was also noted as a strength by staff.

Resources. The curriculum contains extensive resources as hyperlinks as well as suggested materials and lesson plans (ones the staff found to be helpful in supporting their instruction). The resources provide materials for struggling and advanced learners. These resources are available to cover the standards and

teachers can use them to supplement their instruction. Staff cited the read aloud resources, the concept maps, and the resources in the math planning guides as good resources.

Organization of the materials. Staff regarded the curriculum to be organized. Units have been broken down into organized sections in the written curriculum. They mentioned the curriculum is comprehensive and they found it easy to synthesize.

Essential questions and Transfer Tasks. Staff recognized that the essential questions are provided for every unit in the written curriculum. Since they are available, staff do not have to spend their time developing essential questions on their own. As one staff member summarized,

I think the curriculum attempts to help students engage with real-world problems and scenarios. For example, essential questions in the ELA curriculum ask students to consider social and ethical issues that citizens should in some way be grappling with. At its best, this assists in capturing young people's attention while also supporting their emergent critical thinking.

Curriculum as a pacing guide. Staff mentioned the written curriculum as a helpful pacing guide as it paces out the year in units. It also helps them regulate the pacing of instruction and the standards.

Backwards planning model. The staff are able to prioritize and focus on student learning when planning. They mentioned the backward mapping model, "is an excellent way to encourage best practice of beginning with the end in mind."

Biggest Challenge to Implementing the Written ACPS Curriculum

In their open-ended comments, ACPS staff talked about their biggest challenge in implementing the written curriculum. Six themes emerged: meeting needs of diverse students, overload of work with a lack of instructional time, inaccessible hyperlink resources, misalignment of curriculum to VA SOLs, a cumbersome and inflexible curriculum, and some subject-specific challenges to implementing the written curriculum. Each theme is described in more depth below.

Diverse student needs. Staff acknowledged the extremely diverse students attending ACPS, make it difficult for a single curriculum to address such different needs. According to staff, the written curriculum lacks academic equity; for example, it does not provide strategies to teach students who are ELLs, SWD, and students with different reading levels. Teachers end up adapting the content for every lesson.

Work overload and lack of instructional time. Staff identified that, in trying to address the diverse needs of their student population and trying to balance this with other work-related demands (testing, concerts, and rallies), they are overworked. Translating the written curriculum into instruction and materials for effective use to teach students within the available time is challenging.

Hyperlink resources that are inaccessible. Staff reported the hyperlinks provided as resources in the curriculum frequently did not work. As one staff member commented, "the suggestions, lessons, and tools that are provided per unit are mostly hyperlinks, and while they might have been active, relevant, and functional when the curriculum guide was written, those [external] links are ephemeral and don't always work a year or two later." Due to the lack of resources, teachers are developing their own set of materials from different sources.

Misalignment of curriculum to VA SOLs. Staff reported the written curriculum does not completely align with the VA SOLs and is frequently not developmentally appropriate. Some pointed out that the

curriculum was missing a few standards and lacks sequential order. They reported that the instructions for concepts are scheduled prior to instruction for prerequisite concepts. As one staff member explained, "As written, the units of study are loosely aligned to state standards, and several of the assessments are not aligned to standards."

Cumbersome and inflexible curriculum. Overwhelmingly, staff reported the written curriculum is too unwieldy and difficult to navigate. They indicated it is extremely lengthy, lacks depth, is complicated, and that parts of the curriculum are repetitive. Some reported it does not include lessons or pacing guides to integrate across contents. Teachers have to scroll through numerous pages to find the units and objectives, "It makes sense from a developer perspective, but not as a teacher who is using it as they end up wasting precious time scrolling through it to find relevant information." They reported the Transfer Tasks are too challenging, "The curriculum does not include realistic, tried, and ready-made tasks for each unit." Most of them have to modify the whole curriculum in order to make it accessible for ELLs and SWD. Staff felt the curriculum is "too structured and rigid." It does not allow enough flexibility for teachers to explore subjects of interest to students. The curriculum does not lend itself to much creativity or extended learning due to the fast pace and multiple sub-skills to teach.

Subject-specific challenges. Staff reported the science curriculum is sparse on resources and the time allocations and instructional blocks are restrictive to curriculum implementation. They also perceived reading, writing, and social studies curriculum to be challenging because, "it is too vague and there is no consistency with materials and texts."

Change with Greatest Positive Impact

Staff provided comments on one change that could have the greatest positive impact on the written curriculum. Six themes emerged as suggestions: a curriculum applicable to diverse student needs, alignment to VA SOLs, incorporating a pacing guide, simple and user-friendly curriculum, teacher involvement in building the curriculum, and flexibility to use the curriculum. Each theme is described in more depth below.

Curriculum applicable to diverse student needs. Staff reported creating a curriculum that gives alternatives for SWD would have a positive impact to the written curriculum. They also suggested having a "true ELL-friendly version of the curriculum."

Alignment to the VA SOLs. Staff strongly suggested the curriculum should be aligned to the VA SOLs. As one staff commented, "I think that for student success, the curriculum should be aligned with the Virginia Standards from start to finish without taking out information or adding material that is not testable." Staff suggested to align the written curriculum to a different textbook resource that is properly aligned with the SOL rather than the text currently used for the written curriculum. Staff also suggested creating an "end of the unit assessment aligned with the SOL provided by ACPS to help guide instruction."

Incorporating a pacing guide. Staff suggested creating a calendar with a detailed pacing guide, aligned with good resources, skills progression, and powerful lesson examples for each unit. One suggestion was to create a division-wide pacing guide and other suggestion was to use "Arlington's or Prince William County" pacing guide.

Simple and user-friendly curriculum. Reducing the length and the scope of the curriculum through organizing and removing redundant pages was suggested. Annual updates to the curriculum with teacher input to keep it current was also recommended. Removing the transfer tasks and some standards as well as making sure teachers have access to the suggested resources was also suggested by staff.

Teacher involvement in building the curriculum. Staff suggested teacher involvement in writing the curriculum. Staff also suggested hiring ELL teachers or specialists to create materials that supplement the curriculum. Staff voiced that their comments about the curriculum were not taken seriously,

Teachers have the most direct experience with the curriculum and are the only people who can truly say what is working and not working and their voices should be heard.

Built-in flexibility to use the curriculum. Aligned with teacher involvement in writing the curriculum, staff also suggested there should be teacher autonomy in using the curriculum as they see fit for their student needs. For example, literature teachers should have flexibility in unit order and text choice.

A number of parent survey items aligned with Task 3, including questions about ACPS schools having high expectations for students and the degree of satisfaction regarding their child's or children's academic progress.

Parent

Parents responded to questions about ACPS having high expectations for students, feeling like a place where learning occurs, being a good place for students, preparing students for the future, and teaching students essential skills. Parents also provided their satisfaction with student academic progress. Results are provided by parents who have children at one education level (i.e., elementary, middle school, or high school) and parents who have children at multiple education levels (i.e., elementary, middle school, and/or high school). For parents with children at one education level, results are displayed by education level. For parents with children at multiple education levels, results are displayed with all education levels aggregated.

Child(ren) at One Education Level

Elementary

Parents who have child(ren) in an ACPS elementary school had high levels of endorsement for survey items related to student learning at ACPS. Parents had the highest level of agreement for the item "ACPS looks and feels like a place where learning occurs" at 93%. Parents had the lowest level of agreement for the item "Overall, I am satisfied with my child's academic progress" at 86% yet it was still a high level of endorsement. These results can be reviewed in Figure 32.

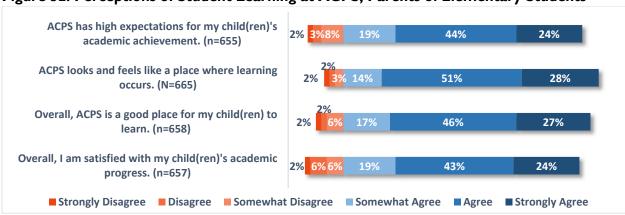
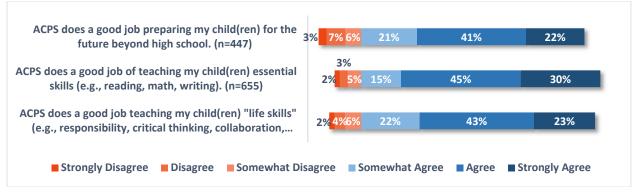


Figure 32. Perceptions of Student Learning at ACPS, Parents of Elementary Students

Parents had the highest level of agreement for the item "ACPS does a good job of teaching my child essential skills (e.g., reading, math, writing)" at 90%. Parents had the lowest level of agreement for the

item "ACPS does a good job preparing my child for the future beyond high school" at 84%. These results can be reviewed in Figure 33.

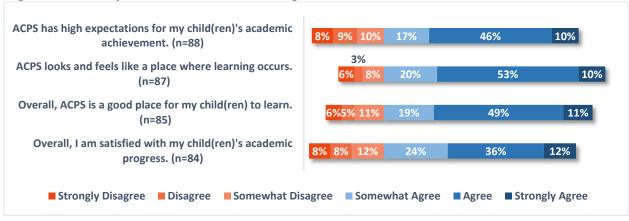
Figure 33. Perceptions of Student Readiness for Future, Parents of Elementary Students



Middle School

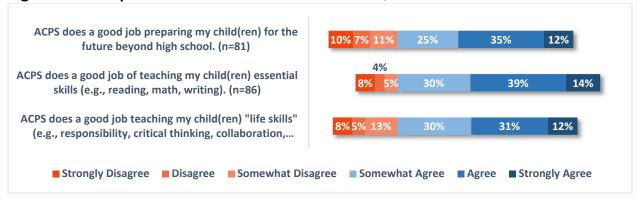
Parents who have child(ren) in an ACPS middle school had high levels of endorsement for survey items related to student learning at ACPS. Parents had the highest level of agreement for the item "ACPS looks and feels like a place where learning occurs" at 83%. Parents had the lowest level of agreement for the item "Overall, I am satisfied with my child(ren)'s academic progress" at 72%. These results can be reviewed in Figure 34.

Figure 34. Perceptions of Student Learning at ACPS, Parents of Middle School Students



Parents had the highest level of agreement for the item "ACPS does a good job of teaching my child essential skills (e.g., reading, math, writing)" at 83%. Parents had the lowest level of agreement for the item "ACPS does a good job preparing my child for the future beyond high school" at 72%. These results can be reviewed in Figure 35.

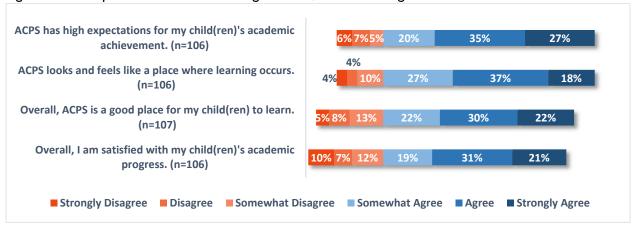
Figure 35. Perceptions of Student Readiness for Future, Parents of Middle School Students



High School

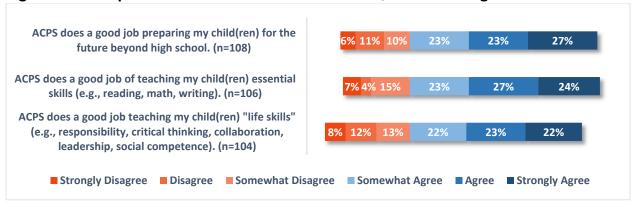
Parents who have child(ren) in an ACPS high school had high levels of endorsement for survey items related to student learning at ACPS. Parents had the highest level of agreement for the item "ACPS looks and feels like a place where learning occurs" and "ACPS has high expectations for my child(ren)'s academic achievement" at 82%. Parents had the lowest level of agreement for the item "Overall, I am satisfied with my child(ren)'s academic progress" at 71%. These results can be reviewed in Figure 36.

Figure 36. Perceptions of Student Learning at ACPS, Parents of High School Students



Parents had the highest level of agreement for the item "ACPS does a good job of teaching my child essential skills (e.g., reading, math, writing)" at 74%. Parents had the lowest level of agreement for the item "ACPS does a good job teaching my child "life skills" (e.g., responsibility, critical thinking, collaboration, leadership, social competence)" at 67%. These results can be reviewed in Figure 37.

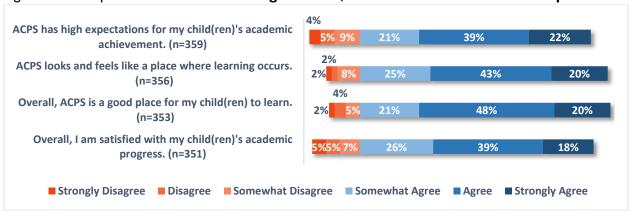
Figure 37. Perceptions of Student Readiness for Future, Parents of High School Students



Child(ren) at Multiple Education Levels

Parents with children at multiple education levels had high levels of endorsement for survey items related to student learning at ACPS. Parents had the highest level of agreement for the items "Overall, ACPS is a good place for my child to learn" (88%). Parents had the lowest level of agreement for the item "ACPS has high expectations for my child(ren)'s academic achievement" at 82%. These results can be reviewed in Figure 38.

Figure 38. Perceptions of Student Learning at ACPS, Parents with Children at Multiple Levels



Parents had the highest level of agreement for the item "ACPS does a good job of teaching my child essential skills (e.g., reading, math, writing)" at 85%. Parents had the lowest level of agreement for the item "ACPS does a good job preparing my child for the future beyond high school" and "ACPS does a good job teaching my child(ren) "life skills" (e.g., responsibility, critical thinking, collaboration, leadership, social competence)" at 82%. These results can be reviewed in Figure 39.

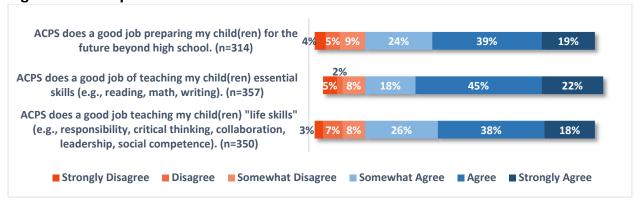


Figure 39. Perceptions of Student Readiness for Future

Discussion

The purpose of Task 3 was to assess the extent to which the ACPS written and taught curriculum are aligned, and the process included gathering input from multiple stakeholders (administrators, teachers, students, and parents). Findings indicate that stakeholders have diverging viewpoints on some issues, and to better understand these differing perspectives, additional data collection may be needed.

Based on the pre-observation questionnaire and the observations by McREL researchers, ACPS teachers plan instruction based on ACPS written curriculum content and VA SOLs. Classroom observers documented that 83% of elementary, 84% of middle school, and 96% of high school teachers enacted at least one planned lesson objective during the observations. However, it is uncertain whether teachers used the ACPS curriculum guides to prepare the lessons that were observed, particularly since staff survey results indicate limited use of the ACPS curriculum guide as the primary resource for planning and delivering instruction (with 59% of elementary teachers indicating that they sometimes or seldom use the ACPS curriculum guide, 50% of high school teachers indicating that they never or seldom use the ACPS curriculum guide, and 53% of middle school teachers indicating they always or often use the ACPS curriculum guide). In focus groups, teachers reported consulting the ACPS written curriculum for general guidance on content and pacing which might provide insight as to why content in the observed lessons appear to be aligned with content in the ACPS written curriculum. However, on survey questions, teachers across education levels (92% of elementary, 90% of middle school, and 89% of high school) remarked that the ACPS curriculum must be supplemented with other resources to meet expectations for VA SOLs.

Findings suggest numerous strengths and areas for growth of the ACPS written curriculum. In focus groups, teachers and administrators reported the greatest strength of the ACPS written curriculum is the continuity across the division and the integration of technology. Teachers also indicated numerous benefits of the ACPS written curriculum to support their implementation including the integration of the essential questions to provide guidance and direction, identification of key vocabulary for lesson plan development, and providing an overview of units allowing the teacher to quickly learn what needs to be covered.

Some areas of growth for the ACPS written curriculum include useful resources, pacing and sequencing, and alignment of Transfer Tasks to the written curriculum. In focus groups and surveys, teachers and administrators reported teachers often supplement the ACPS written curriculum. In focus groups, administrators recommended leveraging the expertise of teachers to enhance the ACPS written curriculum and the accompanying resources, particularly for special student populations. Staff survey data suggest staff perceive the ACPS written curriculum as somewhat complete for their education level

and/or content area (60% of elementary classroom teachers and 50% of middle school classroom teachers). In focus groups, teachers and administrators reported the pacing of the written curriculum as it relates to the ACPS-developed assessments is too fast. Additionally, they reported the curriculum does not align with the ACPS-developed assessments administration schedule, which render ACPS-developed assessments data of limited use for making instructional decisions. This corresponds with survey findings indicating the ACPS-developed assessments are somewhat used for instruction and decision-making (47% of elementary classroom teachers, 42% of middle school classroom teachers, and 39% for high school classroom teachers).

Parent perceptions of student learning at ACPS are positive with parents of elementary students having the most positive perceptions. Most parents of ACPS students had higher levels of endorsement for ACPS teaching their child(ren) essential skills over ACPS preparing their child(ren) for the future after graduating from high school. Even so, parents perceive ACPS as a place where learning occurs.

CHAPTER 6. TASK 4: DETERMINE THE EXTENT TO WHICH THE NEEDS OF SPECIAL POPULATIONS ARE MET IN THE CLASSROOM

Addressing the Needs of Special Populations

With very few exceptions, all students are expected to demonstrate mastery of grade level standards regardless of primary language, (dis)ability, or gifts and talents. Students bring a wide variety of skills, needs, and interests in learning to the classroom setting. Because of this, it is important for educators to understand how to specifically address the unique needs of students who are English-language learners (ELL), with disabilities (SWD), or talented and gifted (TAG). When teachers deeply understand the standards, instructional resources, materials available, research-based strategies, assessment accommodations, and how to leverage student metacognition, outcomes for these specific student populations are significantly improved.

Commendations and Recommendations

When reviewing the findings for Task 4, the extent to which the needs of special student populations are met in the classroom, McREL consultants and researchers noted many commendable attributes of the curriculum that should be retained, as well as some recommendations for improvement. For data to rise to the level of a commendation or recommendation, McREL consultants and researchers looked for intersections among and between data sources as well as the level of endorsement on a topic from survey items and focus groups. For example, if an instructional feature was observed in a majority of classes and this same topic was highly endorsed through surveys and focus groups, the topic was considered noteworthy. Additionally, if an instructional feature was seldom observed during classroom observations and was not highly endorsed through surveys or focus groups, the topic was considered as a possible recommendation.

Commendations

Overall

- At all education levels, teachers planned for a variety of student learning needs and adjusted their instruction during the lesson to better meet student learning needs. Noteworthy results include: elementary teachers planned for a variety of student learning needs in 92% of the observations.
- The division resources for differentiating instruction and executive function provide helpful instructional ideas for how to meet the needs of a variety of learners and for encouraging self-regulation and self-direction in the classroom.
- Including "Key Academic Vocabulary" at the start of each unit in all content areas benefits students with disabilities (SWD) and English-language learners (ELL). For many SWD, learning academic vocabulary can be a challenge, and this assists teachers to prioritize the words students need to master and understand deeply.
- Parents with children at all education levels within ACPS perceived ACPS as meeting the
 academic needs of their children. Additionally, parents with children at the elementary level
 had positive perceptions of the ACPS services provided to their child for their specific
 learning needs.

Specific to English-Language Learners

- The Grade 8 English Curriculum Guide is a strong example for how to integrate English Language Development (ELD) standards and practices into the general education curriculum and instruction. The call-out boxes with English for Academic Purposes (EAP) can assist English teachers and ELL teachers to understand how their instruction can be complementary and work together to improve both language and content outcomes.
- Several resources are provided for meeting the needs of ELLs including Best Practices for English Learners, Language Acquisition Strategies for Curriculum Integration, Strategies for Promoting Culturally Responsive Classrooms in ACPS, the Guided/Scaffolded Transfer Tasks, and "Instructional Practices to Support ELLs" in each unit of each curriculum guide.
- Instructional resources, materials, and strategies for ELLs are a strength in the curriculum guides. They are specific to the content of each unit by grade level.
- Parents with children at all education levels within ACPS receiving ELL services had positive
 perceptions of these services as evidenced by parents endorsing survey items related to ELL
 services at a rate of at least 85%.

Specific to Students with Disabilities

• The Grade 8 English Curriculum Guide contains resources and connections to foundational literacy skills that can benefit instruction for SWD. At the end of each unit, suggested readings are included for a variety of reading levels.

Specific to Talented and Gifted Students

 The Grade 5 TAG Math and Reading Curriculum Guides contain extensive materials, resources, and instructional practices designed to meet the needs of TAG students, which could serve as a model for how other content areas and grade levels include suggestions for meeting the needs of TAG students.

Recommendations

Overall

- Review the written curriculum and provide more specific differentiation suggestions for the respective student populations as they relate to the content of the unit. Instructional materials, resources, and practices for SWD and TAG throughout the curriculum guides were redundant and not specific to the content of each unit. Teachers indicated the written curriculum does not provide sufficient support to help plan instruction specific to their students' unique learning needs, so they seek out and utilize resources from other sources. Further, with the exception of high school administrators, survey results indicate the majority of ACPS staff perceived the ACPS written curriculum as not providing thorough guidance to help address the learning needs of special student populations.
- Re-align the written curriculum and Transfer Tasks, so pacing is feasible, sequence is logical, and alignment to the VA SOLs is clear. Administrators reported the pacing of Transfer Tasks is too fast and formatively using data garnered from the Transfer Tasks to meet student learning needs is unfeasible. Administrators also reported teachers re-ordered the curriculum to meet the needs of their students. Administrators indicated the Transfer Tasks need to be better aligned with the VA SOLs. Although these recommendations from administrators impact all students, issues regarding pacing, sequence, and alignment may impact students from special populations more severely.
- Provide professional development across all education levels to help teachers more effectively promote student metacognition strategies. During classroom

observations, teachers at the elementary and middle school levels used strategies to promote student metacognition in 32% and 29%, respectively. High school teachers used strategies to promote student metacognition in 42% of the classroom observations. Although written curriculum guides provide strategies for metacognition, these strategies were not consistently evident during classroom observations.

Specific to English-Language Learners

- Consider using the Grade 8 English curriculum guide as a model for other grade level and content areas regarding how to address the needs of ELLs in an integrated manner.
- Provide guidance for each unit on ways to accommodate pre-assessment and diagnosis as well as formative assessments for ELLs to ensure teachers have a variety of strategies to understand the content knowledge as well as language knowledge, thereby leading to improved decision-making for subsequent instructional moves.

Specific to Students with Disabilities

- Develop resources for a variety of disability and ability types. Include the best ways to make curricular and instructional decisions (e.g., when should the IEP team or special education teacher be consulted; how to determine which Transfer Task to use; or possible accommodations for assessments) in the resources. Although this is a very diverse population, minimal general guidance is provided to help teachers understand how to meet the needs of SWD in terms of materials, resources, or instructional practices.
- Develop guidance for teachers to understand how to use and/or develop a variety of assessment techniques that allow SWD to demonstrate content knowledge and understanding without disability interference. In addition, guidance should include when it would be appropriate to consider accommodations or modifications to assessments, and when to seek out assistance from the special education teacher or the IEP Team. No guidance is provided regarding pre-assessment and diagnostic assessment, formative assessments, or Transfer Tasks for SWD.
- Build communication strategies and support opportunities to help middle and high school parents understand how their children are being served by ACPS special education services. Survey results indicated middle school parents had unfavorable perceptions and high school parents had somewhat favorable perceptions of ACPS special education services for their children. School administrators can support parents of child(ren) with disabilities by:
 - Supporting home-visits (Epstein, 2011)
 - Asking parents what could help improve parent and school partnerships, and convene a committee to address those needs (Epstein, 2011)
 - Developing a parent resource center that includes current information and resources (SERVE Center, n.d.)
 - Offering training to support parents in learning about special education and the role of the family (SERVE Center, n.d.)
 - Offering training on topics of importance to parents (SERVE Center, n.d.).

Teachers can support parents by:

- o Engaging in home visits to understand students and parents (Epstein, 2011)
- Offering training to support parents in helping their children with homework, social, emotional, and behavioral interactions, and developing special talents (Epstein, 2011)
- Asking parents to share information about their children including strengths, concerns, and their priorities (Epstein, 2011)

- Providing assignments to students that require them to engage in learning activities with their parents (e.g., reading together, engage in discussions of topics being studied, playing a game or doing an activity to reinforce learning, developing a contract between teacher and parent) (Epstein, 2011)
- o Discussing the skills and talents of student with their parents (SERVE Center, n.d.)
- Working collaboratively with parents to make important educational decisions (Epstein, 2011)
- o Developing goals collaboratively with students and parents (Epstein, 2011)
- Communicating regularly with parents and students about progress towards goals (Epstein, 2011)
- Making positive phone calls when students have had good days, or achieved important milestones (Epstein, 2011)
- Providing parents with information and/or referrals about support groups. (SERVE Center, n.d.).
- Include Lexile levels for teachers to be able to make informed decisions regarding assigning readings to students based on interest and reading level.

Specific to Talented and Gifted Students

- Consider using the Grade 5 TAG Math and Reading Curriculum Guides as a
 model for other grade level and content areas regarding how to address the needs of
 students identified as TAG in the general education classroom. These guides include
 extensive resources specific to content and practices for instructional planning;
 recommendations for collaboration and co-planning between grade level teachers and
 teachers of TAG; and integration opportunities across content areas.
- Develop resources regarding the typical needs of TAG students, how to extend rigor and relevance in the classroom, and when to consult with a teacher with specialized knowledge of TAG. Little guidance is provided to help teachers understand how to meet the instructional needs of students identified as TAG.
- Provide guidance for each unit on ways to accommodate pre-assessment and diagnosis as well as formative assessments for students identified as TAG to ensure teachers have a variety of strategies to understand the content knowledge thereby leading to improved decision-making for subsequent instructional moves.

Findings

Written Curriculum Documents

The primary documents in the ACPS written curriculum are the curriculum guides, which are provided for each individual grade or course and include links to the Transfer Tasks and other support material. Each curriculum guide begins with an introduction that provides an overview of the course and curriculum. Links to online resources are provided in the introduction, and many links are presented again within each unit. In some cases, these resources are designed to specifically target special populations. Examples include the ACPS Language Acquisition Framework; ELL Strategies; and Strategies for Promoting Culturally Responsive Classrooms in ACPS. In some cases, resources were also provided that could support a variety of populations including TAG students and SWD. Resources for these special populations include the Differentiation Framework; Executive Function Research & Strategies; and the Honors Design Principles documents. These were all reviewed by the McREL experts as a part of this evaluation.

The introduction of the curriculum guide is followed by a Year at-a-Glance page, which provides pacing for each unit and a list of the primary SOLs addressed in each unit. Some SOLs, such as those that

address reading fluency and communicating in groups, are listed as "spiraling" as they are addressed continuously. With the exception of the *Grade 8 English Curriculum Guide*, no curriculum guides included the World-Class Instructional Design and Assessment (WIDA) ELD Standards addressed in each unit.

Analysis

After reviewing the national literature base on what should be addressed to ensure the needs of special student populations, McREL developed a set of criteria to review the curriculum. These criteria include the extent to which the ACPS written curriculum addresses WIDA ELD Standards (2008) for language learners; these standards, approved by the Board of Education in the Commonwealth of Virginia, describe the expectations English learners must acquire and negotiate to participate successfully in school. Additional criteria included instructional resources and materials for the targeted special student populations; instructional strategies for addressing the needs of special populations; assessment recommendations and accommodations for special populations; and encouraging metacognition for those populations.

The alignment of the written curriculum was reviewed by McREL instructional experts using a rubric developed specifically for ACPS based on the identified criteria. The criteria were assessed on a three-point scale with a zero (0) indicating that no evidence in the curriculum was found to address the criteria, a one (1) indicating partial evidence was found in the written curriculum to address the criteria, and a two (2) indicating that full evidence was found in the curriculum to address the criteria. In order to score a 2, reviewers noted that ample evidence was found supporting the criteria in multiple parts of the curriculum guides for the grade level and content area. When evidence was found in only parts of curriculum guides, was vague or repetitive, a score of I was utilized. When reviewers were unable to locate any evidence of the criteria in any part of the curriculum guides, a score of 0 was assigned. When aggregating scores, reviewers utilized the median score. This rubric provided McREL reviewers the means to record evidence of the extent to which the curriculum addressed the needs of the targeted special population subgroups. The documents were then evaluated in order to report on each criterion, and all findings were subject to review by more than one McREL expert. Table 10 displays the criteria used to evaluate the curricula, and the rubrics for each criterion are shown in Appendix A.

Table 10. Criteria and Descriptions Used to Evaluate Each Criterion

Criteria	Description
English Language Development Standards	Evidence that language development standards are incorporated into the curricula and specific recommendations are made regarding which standards to target by unit (This was reviewed specifically for ELL students only.)
Instructional Resources and Materials for Special Populations	A variety of resources are provided to optimize challenge and enable access to grade level objectives.
Instructional Strategies for Special Populations	A variety of instructional strategies are provided to differentiate for students with varying learning needs and are specifically designed to complement the content each unit.
Assessment Accommodations	Accommodation suggestions are provided to enable students with varying learning needs to demonstrate their understanding of learning objectives.
Metacognition	Suggestions are included to facilitate student self-regulation and ownership of their learning.

Summary of Findings

Overall, the reviewed curriculum guides across all levels and content areas offer partial evidence for how to support the needs of students who are ELLs, SWD, and TAG. The majority of ACPS resources

provided to address the needs of these populations are contained in the introduction of the curriculum guides and then repeated at the end of each unit. While helpful first steps, the instructional resources and practices are not specific to content area or grade level, and require teachers to invest more time planning, researching, and understanding how to apply the practices to the content areas. Additionally, resources on differentiation, executive function research and strategies, and honors design principles could be used to differentiate for the needs of SWD and TAG. Fewer resources were available specific to units of instruction by grade level or content area for SWD and TAG student populations.

Instructional resources and practices for addressing the needs of ELLs, SWD and TAG are general in nature, and in some cases, particularly for SWD, are missing. The majority of the curriculum guides provide boxes in each unit regarding instructional practices to support ELLs, although they tend to provide the same suggestions repeatedly. For example, most guides recommend "Comprehensible Input," and "Explicit Language Instruction" for each unit. While these are appropriate and research-based recommendations, they are general in nature and do not provide ideas for how to apply these strategies to the specific content. In the Learning Plan section of each unit, many instructional recommendations include ideas for differentiation that would benefit students who are ELL, SWD, and TAG, yet these recommendations do not specifically reference these student populations. Calling attention to these strategies with the frame of special student populations could be helpful to teachers as they are planning. Few instructional strategies were provided specifically for SWD and TAG.

Assessment accommodations are missing for all student groups specific to pre-assessment and formative assessment, and are missing for SWD related to Transfer Tasks. These summative Transfer Tasks are, for ELLs and TAG specifically, addressed and provide strong guidance regarding how to administer, support, and assess these two groups based on identified needs. Transfer Tasks provide differentiated options for students who are ELLs (Levels I–4) and TAG. No instructions are provided for accommodating SWD or making decisions regarding the appropriate task to choose.

Supporting student metacognition including self-regulation and ownership of learning was a strength of the curriculum guides. All guides provide strategies for promoting students' executive function and metacognition, and the majority include higher-order thinking questions to promote discussion and debate. In most cases, the suggestions are similar if not identical, and are not specifically targeted to the unit of instruction. No suggestions are provided regarding how to leverage these suggestions for ELL, SWD, or TAG, which is why this received a rating of partial evidence. The remainder of this section discusses the findings for each special student population: ELL, SWD, and TAG.

Key Findings for English-Language Learners

With one notable exception (Grade 8 English), no connections are made to the English language development (ELD) standards addressed by grade level or content area. The inclusion of this is considered important as it provides teachers with specific targets to address for language standards as they relate to the content standards, and provides a clear bridge for ensuring students who are ELL can access the content regardless of language level. In addition, understanding the ELD standards addressed by unit can ensure alignment between what ELLs learn in their general education courses and their ELL courses. The Grade 8 English Curriculum Guide is the notable exception to this in that it provides full evidence for three of the five criteria (i.e., ELD Standards, Instructional Resources and Materials for Special Populations, and Metacognition) and partial evidence for the remaining two criteria (i.e., Instructional Strategies for Special Populations and Assessment Accommodations). It provides teachers with clear ELD standards tied to the VA SOLs, and how these complement each other and can be leveraged to ensure mastery of both sets of standards.

Instructional resources and materials for English-language learners are considered a strength in the curriculum guides. Resources for ELLs are the most extensive and specific and include detailed suggestions for introducing key academic vocabulary, instructional resources by unit for using sentence stems with ELLs, additional language outputs tied to ELD standards that ELLs should be able to do, and suggested readings for ELLs by Lexile and language level.

Instructional strategies for special populations represented another strength in the curriculum guides. Suggestions for practices are specific to content areas and grade levels. These include ideas for explicit language instruction, cooperative learning structures, a writing toolkit with differentiation ideas, and strategies for supporting formal and informal speaking and listening skills.

The curriculum guides provide no guidance regarding how to accommodate pre-assessment and diagnosis and formative assessments for ELLs. Because this information is used to make instructional decisions, understanding a variety of ways to conduct these assessments for students with limited English language proficiency is important so teachers do not confuse limited English proficiency with limited content knowledge.

The curriculum guides do provide Guided/Scaffolded Transfer Tasks specifically designed for students who are English-language learners, particularly those at language levels I—4. The tasks do not adjust expectations in terms of the content, rather they provide scaffolding strategies to increase language supports or modification. Guides provide clear expectations for how to administer the tasks, provide support for completion, and score them based on language levels.

Almost all of the curriculum guides include a link to the document Executive Functions: Research and Strategies which includes suggestions and ideas for ensuring students engage in this practice. In addition, almost all of the guides provide strategies at the end of each unit for promoting metacognition. However, most suggestions are not specific to the content by unit nor to engaging ELLs in this practice regardless of language ability. Figure 40 presents the scores for each criteria as they relate to the ACPS written curriculum guides specifically for ELLs.

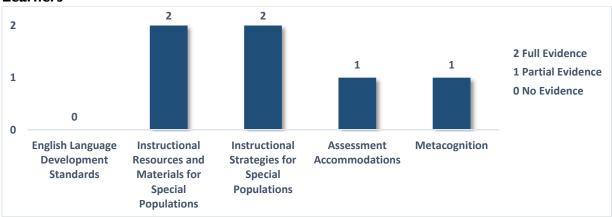


Figure 40. Criteria Scores for the Written Curriculum Guides Related to English-Language Learners

Note. Grade 8 English Curriculum Guide received *full evidence* for three of the five criteria (i.e., ELD Standards, Instructional Resources and Materials for Special Populations, and Metacognition) and *partial evidence* for two criteria (i.e., Instructional Strategies for Special Populations and Assessment Accommodations)

Key Findings for Students with Disabilities

Instructional resources and materials specifically indicated as useful for supporting SWD are largely missing. The *Differentiation Framework* document provided in the introduction to each curriculum guide can be helpful in addressing the needs of SWD. In addition, several of the reading, writing and English guides contained instructional resources such as differentiation techniques in the Learning Plan section for each unit. All of the curriculum guides include key academic vocabulary for each unit, and some include resources for teaching, reinforcing, and practicing use of the vocabulary. None of these resources were identified as being specifically for use with SWD, though they certainly can and should be used to help address the needs of SWD.

The exception to this is the Grade 8 English Curriculum Guide which includes resources and connections to foundational literacy skills. Web resources are provided in the introduction that assist teachers with differentiating for students who read at lower reading levels (i.e. Reading Rockets, International Reading Association, and ReadWriteThink.org). In addition, the tools provided for ELLs such as the variety of recommended readings, discussion frames, cooperative learning structures, and vocabulary practice could also benefit SWD, though these are not specified for SWD.

Instructional strategies for SWD are largely missing. The instructional practices recommended in the Learning Plan section of each guide contains a variety of lesson ideas that are differentiated in nature, and would help to address the needs of SWD. The Grade 8 English Curriculum Guide also includes a Writing Toolkit with differentiated instructional strategies that could benefit SWD. None of the strategies are identified as being specifically for use with SWD, though they do provide teachers with instructional practices for addressing the needs of SWD.

The curriculum guides provide no guidance regarding how to accommodate pre-assessment and diagnosis, formative assessment, nor for Transfer Tasks for SWD.

Almost all of the curriculum guides include a link to the document *Executive Functions: Research and Strategies* which includes suggestions and ideas for ensuring students engage in executive function practices. In addition, almost all of the guides provided strategies at the end of each unit for promoting metacognition. Most suggestions were general, however, and not specific to the content by unit, nor to engaging SWD in this practice.

Figure 41 presents the scores for each criteria as they relate to the ACPS written curriculum guides specification for SWD. Please note the criteria related to English Language Development Standards (2008) was not reviewed for SWD.

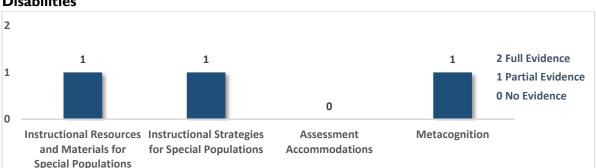


Figure 41. Criteria Scores for the Written Curriculum Guides Related to Students with Disabilities

Key Findings for Talented and Gifted Students

Instructional resources and materials specifically identified as supporting the needs of TAG students are largely missing. At the secondary level, two documents: Honors Curriculum Design Principles, and Rigor and Relevance in the Honors Curriculum, are provided, though they do not specifically call attention to how they address the needs of students identified as TAG. The Differentiation Framework document provided in the introduction to each curriculum guide can be helpful in addressing the needs of students identified as TAG. In addition, several guides contained differentiation techniques in the Learning Plan section for each unit. None of these resources were identified as being specifically for use with TAG, though they certainly can and should be used to help address the needs of students identified as TAG. The exceptions to this are the Grade 5 TAG English and Math Guides. These guides are designed to address TAG students' needs for acceleration, enhancement, and learning extensions. Extensive resources are provided throughout the guides to address the needs of TAG students.

Instructional strategies for TAG students are largely missing. The instructional practices recommended in the Learning Plan section of each guide contains a variety of lesson ideas that are differentiated in nature, and would help to address the needs of TAG. The Grade 8 English Curriculum Guide also includes a Writing Toolkit with differentiated instructional strategies that could benefit students identified as TAG, however, the guide does not specify that these strategies benefit TAG students, and explicit guidance would help teachers attend to this student population. The exceptions to this are the Grade 5 TAG English and Math Guides. These guides are designed to address TAG students' needs for acceleration, enhancement, and learning extensions. Instructional practices are provided throughout the guides in the Learning Plan.

The curriculum guides provide no guidance regarding how to accommodate pre-assessment and diagnosis and formative assessment for students identified as TAG. Because this information is used to make instructional decisions, it is important for teachers to understand a variety of ways to conduct these assessments. In addition, it would be helpful for teachers to have guidance regarding what to do for students who already have mastered all of the content contained in the pre-assessments and diagnostics. The curriculum guides do provide Accelerated/Enhanced Transfer Tasks specifically designed for students who require additional enrichment and enhanced rigor. Guides provide clear expectations for how to administer the tasks, provide support for completion, and score them.

As previously noted, almost all of the curriculum guides included a link to the document *Executive Functions*: Research and Strategies as well as strategies at the end of each unit for promoting metacognition. However, most suggestions were not specific to the content by unit, nor to engaging students identified as TAG in this practice. Figure 42 presents the scores for each criteria as they relate to the ACPS written curriculum guides specification for TAGs. Please note the criteria related to English Language Development Standards (2008) was not reviewed for TAG.

1 1 1 1 1 2 Full Evidence
1 Partial Evidence
0 No Evidence
Instructional Resources and Materials for Special Populations Accommodations
Populations

1 2 Full Evidence
0 No Evidence
Assessment Metacognition
Accommodations

Figure 42. Criteria Scores for the Written Curriculum Guides Related to Talented and Gifted Students

Classroom Observations

Several items within the observational protocol relate to Task 4. These items include: minutes spent in various instructional groupings, teachers using formative assessment data, teachers planning for various student learning needs, teachers adjusting their instruction, and teachers promoting student metacognition. The graphs related to classroom observation results for each grade level are presented in Task 5.

For all education levels, whole group teacher instruction was the predominant instructional grouping utilized during the classroom observations with 58% of elementary classrooms, 39% of middle school classrooms, and 35% of high school classrooms observed spending at least 11 minutes in this structure. Students also spent time doing independent work with 19% of the elementary observations and 22% of middle school observations spending at least 11 minutes in this structure. High school students also spent time doing small group work with 19% of the observations spending at least 11 minutes in this structure.

In 32% of elementary observations, 45% of middle school observations, and 65% of high school observations, teachers used formative assessment data to provide students with feedback which allowed students to take corrective action and to understand next steps for learning. In a large amount of observations across education levels, teachers had planned for a diversity of student learning needs by using a variety of learning tools such as a Smart Board, notes, and PowerPoint slides with 92% of the elementary, 71% of middle school, and 85% of high school observations. In at least 74% of observations across education levels teachers adjusted their instruction for students during the lesson which allowed them to better meet the needs of individual students as well as the entire class (83% for elementary, 74% for middle school, and 85% for high school).

Teachers used strategies to promote student metacognition in 32% of elementary, 29% of middle school, and 42% of high school observations. To enact this, elementary teachers encouraged students to reflect on how they approached a given task as well as used a KWL Chart (e.g., What I Know, What I Want to Know, and What I Learned) while middle school teachers level had students assess their own tests to reflect on what they know. At the high school level, teachers used self-checking technology and discussion prompts to help students reflect on their learning.

Focus Groups

Numerous teacher, student, and administrator focus group questions aligned with Task 4. Teacher focus group questions are related to how the ACPS written curriculum helps meet the needs of special student populations (e.g., ELLs, SWD, and TAG students).

Teacher

McREL researchers conducted seven teacher focus groups with a total of 79 teachers at the elementary, middle school, and high school levels. Teachers talked about how the ACPS written curriculum helped them address the needs of special student populations, including the utility of sample lessons, resource links, and assessment guidance.)

Addressing the Needs of Special Student Populations

Teachers were asked how the ACPS written curriculum helps them address the needs of special student populations, such as ELLs, SWD, and students identified as TAG. For the most part, teachers reported they do not believe the ACPS written curriculum provides sufficient supports in helping teachers plan instruction and assessment for these special student populations. "It almost seems like the curriculum was created in a bubble, and no school is a bubble," commented a teacher. Teachers indicated they do not believe the ACPS written curriculum currently provides sufficient differentiation, explaining that every student and school are unique and have unique needs.

Teachers also indicated they either needed to utilize resources outside of the ACPS written curriculum or modify the ACPS written curriculum on their own in order to meet the needs of TAG students. In its current form, teachers reported the ACPS written curriculum is comprised of two levels, one for honors students and one for "everyone else," but reported that they perceive there to be few differences between these levels. "The honors level maybe has like one more question. It's not actual enrichment," commented a teacher. "It's just two levels. That's it, that's the differentiation. High and low."

Teachers also voiced concerns regarding the extent to which the ACPS written curriculum supports ELLs. When asked to describe the ways in which the curriculum meets the needs of ELL student populations, they indicated the resources available were either insufficient or inadequate. "I don't even know if there's anything in there for ELLs," commented a teacher. "I think they have a section of activities or links, but there's not a whole lot and they're outdated." Other teachers reported the written curriculum only provides general strategies for providing instruction to ELLs as opposed to any specific activities or lessons. "Teachers expressed it would be beneficial to have specific activities and lessons provided by the written curriculum instead of just general strategies. It is important to note this statement appears to contradict the analysis offered by McREL instructional experts regarding the degree to which the ACPS written curriculum supports teachers to serve ELL students. It is possible that teachers did not consider the recommendations offered in additional resources such as Best Practices for English Learners, Language Acquisition Strategies for Curriculum Integration, or Culturally Responsive Classrooms in ACPS.

Teachers indicated they do not feel the ACPS written curriculum provides adequate supports for SWD. In many cases, teachers described needing to take steps to adjust the ACPS written curriculum in order to properly scaffold it based upon student needs, and other teachers reported developing their own materials and seeking out external resources instead of utilizing the ACPS written curriculum at all. A teacher shared.

I have to make sure every single part of the assignments I make are structured in a way that will challenge [students] but also help them learn, so that stuff is not easily found in a curriculum guide or anything. You have to make it yourself and a lot of teachers spend time doing that for all the students, especially the struggling students. So as far as reaching or meeting individual student needs, the curriculum guides or the curriculum material, they don't really meet the mark in that regard.

Some teachers indicated they avoid utilizing the ACPS written curriculum as they consider it cumbersome and/or find navigation to necessary resources for supporting special student populations difficult. "A teacher shared.

Thinking of a certain three, four, five kids you teach, it's almost easier to go your own route and start pulling resources or going online and looking for very specific resources that'll speak to those kids instead of scouring through a curriculum guide. Why would I scour the curriculum guide when I can search the internet or there are blogs that I can follow, or there are things that I have from other schools? [The ACPS written curriculum] just feels more cumbersome.

Administrator

During the administrator focus groups, participants were invited to provide additional comments or feedback about the written curriculum. Administrators touched on the curriculum's appropriateness for students in ACPS schools. In particular, participants felt that more could be done to adapt the curriculum for students with special needs. This has led to teachers developing their own materials to meet the needs of their students. One administrator explained "I think that's the biggest challenge for Alexandria because our curriculum is sort of made for this middle but really the middle doesn't exist for any of us."

Surveys

Many staff and parent survey items aligned with Task 4. Staff survey items related to how the ACPS written curriculum provides thorough guidance to address the needs of ELLs, SWD, students identified as talented and gifted. Parent survey items aligned with Task 4 related to the extent to which ACPS is meeting the individual academic needs of their child(ren). Parent survey items also asked questions specific to their child(ren) receiving services specific to ELL, SWD, and TAG.

Staff

There were 547 staff across ACPS who responded to the survey. Respondents only completed survey items related to their ACPS position, so not every position answered all survey items. The positions of those that selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, school improvement coach, reading specialist, technology integration specialist, career and technical education teacher, classroom teachers who are also ELL teachers, school librarian, and world language teacher; please note that not all respondents provided their "other" position within ACPS. Results are provided by special student population: English-language learners, students with disabilities, and talented and gifted students. Results are also disaggregated by education level.

English-Language Learners

Across all education levels, administrators had the highest level of endorsement for the ACPS written curriculum meeting the needs of ELLs at 57% (elementary and middle school levels) and 80% (high school level). Classroom teachers (36% for elementary, 38% for middle school, and 41% for high school) and those who selected "other" as their position (50% for elementary, 17% for middle school, and 20% for high school) had the lowest endorsement. These results can be reviewed in Figure 43.

The ACPS written curriculum provides thorough guidance to help me address the needs of English-language learners. Classroom Teacher (n=144) ELL Teacher (n=32) Elementary Special Ed. Teacher (n=14) Cntnt Speci/Instruct Coach (n=35) Administrator (n=16) Other (n=12) Classroom Teacher (n=40) ELL Teacher (n=12) Middle school Special Ed. Teacher (n=3) Results are not provided for a sample size less than 5. Cntnt Speci/Instruct Coach (n=7) Administrator (n=7) 57% Other (n=6) 17% Classroom Teacher (n=46) 20% 9% 4% ELL Teacher (n=8) 25% 13% 13% High school Special Ed. Teacher (n=9) 22% 22% Cntnt Speci/Instruct Coach (n=2) Results are not provided for a sample size less than 5. Administrator (n=10) 10% 10% 20% Other (n=5) 20% ■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree

Figure 43. Perceptions of the Written Curriculum Meeting the Needs of English-Language Learners

Students with Disabilities

As with ELLs, administrators had the highest level of endorsement for the ACPS written curriculum meeting the needs of SWD at 53% (elementary level), 43% (middle school level), and 80% (high school level). Elementary and middle school classroom teachers (28% for elementary and middle school levels), elementary content specialists and instructional coaches (28%), middle and high school ELL teachers (25% for middle school and 20% for high school) had the lowest endorsement for the written curriculum meeting the needs of SWD. These results can be reviewed in Figure 44.

The ACPS written curriculum provides thorough guidance to help me address the needs of students with disabilities. Classroom Teacher (n=140) 20% 4%4% ELL Teacher (n=23) Elementary Special Ed. Teacher (n=15) Cntnt Speci/Instruct Coach (n=36) Administrator (n=15) Other (n=12) Classroom Teacher (n=40) ELL Teacher (n=8) Middle school Special Ed. Teacher (n=4) Results are not provided for a sample size less than 5. Cntnt Speci/Instruct Coach (n=7) 14% 14% Administrator (n=7) Other (n=7) 14% 14% Classroom Teacher (n=47) ELL Teacher (n=5) 40% 40% 20% High school Special Ed. Teacher (n=13) 31% 8% Cntnt Speci/Instruct Coach (n=2) Results are not provided for a sample size less than 5. Administrator (n=10) 30% 10% 10% 20% Other (n=5) 40% 20% ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree ■ Strongly Disagree ■ Disagree

Figure 44. Perceptions of the Written Curriculum Meeting the Needs of Students with Disabilities

Talented and Gifted Students

Elementary and high school administrators (63% and 80%, respectively) as well as middle school ELL teachers (60%) had the highest level of endorsement for the ACPS written curriculum meeting the needs of TAG students. Elementary content specialists and instructional coaches (31%); middle school classroom teachers, administrators, and content specialists and instructional coaches (43%); and, high school ELL teachers (40%) had the lowest endorsement for the written curriculum meeting the needs of TAG students. These results can be reviewed in Figure 45.

The ACPS written curriculum provides thorough guidance to help me address the needs of talented and gifted students. Classroom Teacher (n=138) ELL Teacher (n=19) Elementary Special Ed. Teacher (n=11) Cntnt Speci/Instruct Coach (n=32) Administrator (n=16) Other (n=14) Classroom Teacher (n=40) 20% 3% Middle school ELL Teacher (n=5) 40% Special Ed. Teacher (n=2) Results are not provided for a sample size less than 5. Cntnt Speci/Instruct Coach (n=7) Administrator (n=7) 29% 43% Other (n=7) Classroom Teacher (n=47) ELL Teacher (n=5) High school Special Ed. Teacher (n=9) 11% 11% Cntnt Speci/Instruct Coach (n=2) Results are not provided for a sample size less than 5. Administrator (n=10) 10% 10% 33% Other (n=6) ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree ■ Strongly Disagree ■ Disagree

Figure 45. Perceptions of the Written Curriculum Meeting the Needs of Talented and Gifted Students

Parent

Parents responded to questions about their children's individual academic needs being met by ACPS. Parents also responded to questions specific to their child(ren) receiving services specific to ELL, SWD, and TAG. Results are provided by special student population: English-language learners, students with disabilities, and talented and gifted students. Results are also disaggregated by education level. Due to small sample sizes of parent respondents with children receiving services specific to ELL, SWD, and TAG, the results may not be representative of the population.

Parents who have child(ren) at one or multiple ACPS levels had a high level of endorsement for ACPS meeting the needs of their child(ren), with parents who have child(ren) at an ACPS elementary school having the highest level of endorsement at 79%. Parents with child(ren) at an ACPS middle school had the lowest level of endorsement at 65%. These results can be reviewed in Figure 46.

ACPS meets the individual Elementary (n=648) 4% 7% 39% 19% academic needs of my child(ren). Middle school (n=86) 12% 36% 10% 12% High school (n=107) 7% 5% 27% 21% Multiple levels (n=352) 5% 7% 34% 16% ■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree

Figure 46. Perceptions of ACPS Meeting Academic Needs

English-Language Learners

Parents indicated if their child has received services related to English language learning in the 2015-16 school year. Eight percent of parents with child(ren) in elementary, middle school, and high school reported their child(ren) receives English-language learner services while 10% of parents who have child(ren) at multiple education levels reported this. Please note parents who completed the survey self-reported if their child(ren) receives these services. This does not include those parents who did not complete the survey or who did not report their child(ren) receives English language learning services. These results can be viewed in Figure 47.

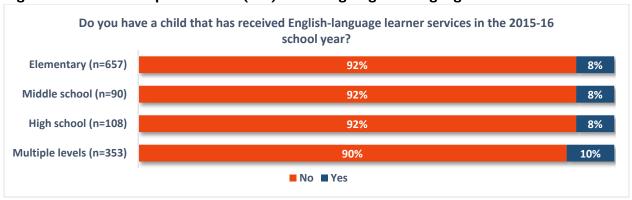


Figure 47. Parents' Report of Child(ren) Receiving English-Language Learner Services

Parents indicated their perceptions of English-language learner services provided by ACPS in the 2015–16 school year. Overall, parents with child(ren) at all education levels reported a high level of endorsement for the services provided by ACPS. These results can be viewed in Figure 48.

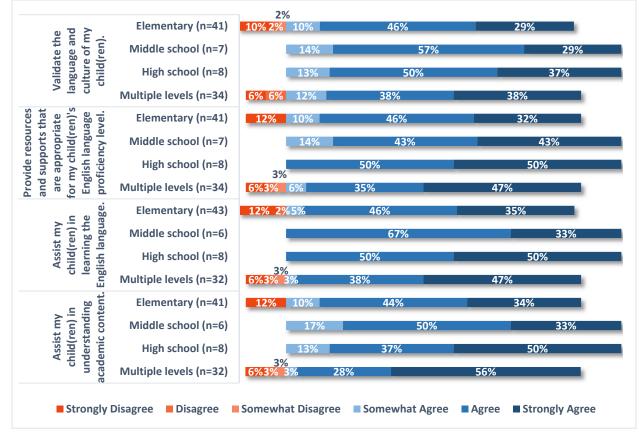


Figure 48. Perceptions of English-Language Learner Services

Students with Disabilities

Parents indicated if their child has received special education services in the 2015-16 school year. On average, 13% of parents with child(ren) in elementary, middle school, and high school reported their child(ren) receives special education services while 17% of parents who have child(ren) at multiple education levels reported this. Please note parents who completed the survey self-reported if their child(ren) receives these services. This does not include those parents who did not complete the survey or who did not report their child(ren) receives special education services. These results can be viewed in Figure 49.

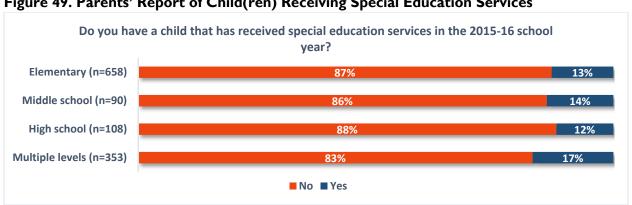


Figure 49. Parents' Report of Child(ren) Receiving Special Education Services

Parents indicated their perceptions of special education services provided by ACPS in the 2015-16 school year. Parents with child(ren) at the elementary and high school levels as well as parents with child(ren) at multiple levels reported a moderate to high level of endorsement for the services provided by ACPS. However, their level of endorsement was slightly less than that of parents with child(ren) receiving English-language learner services. Parents with child(ren) at the middle school level had low levels of endorsement for ACPS special education services. These results can be viewed in Figure 50.

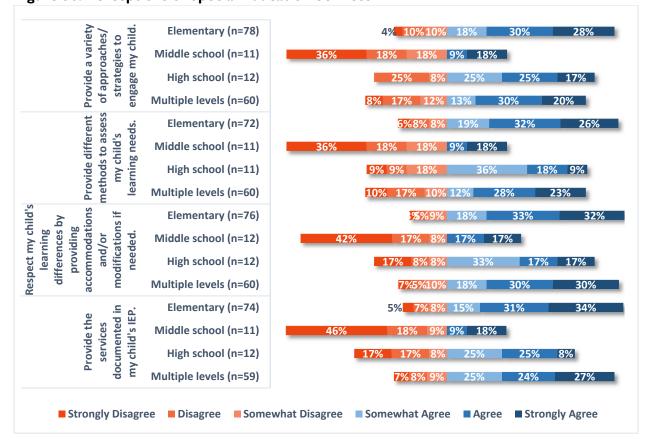


Figure 50. Perceptions of Special Education Services

Talented and Gifted Students

Parents indicated if their child has received talented and gifted services in the 2015-16 school year. Twenty-seven percent of parents with child(ren) in elementary reported their child(ren) receives special TAG services while 7% of parents who have child(ren) at the high school level reported this. Forty-six percent of parents with child(ren) at the middle school level and with child(ren) at multiple education levels indicated their child(ren) receives TAG services. Please note parents who completed the survey self-reported if their child(ren) receives these services. This does not include those parents who did not complete the survey or who did not report their child(ren) receives TAG services. These results can be viewed in Figure 51.

Do you have a child that has received talented and gifted services in the 2015-16 school year?

Elementary (n=670)

Middle school (n=89)

High school (n=109)

Multiple levels (n=363)

No Yes

Figure 51. Parents' Report of Child(ren) Receiving Talented and Gifted Services

Parents indicated their perceptions of talented and gifted services provided by ACPS in the 2015–16 school year. Similar to parents who have child(ren) receiving special education services, parents with child(ren) at the elementary and high school levels as well as parents with child(ren) at multiple levels reported a high level of endorsement for the TAG services provided by ACPS. However, their level of endorsement was slightly less than that of parents with child(ren) receiving English-language learner services. Parents with child(ren) at the middle school level had moderate levels of endorsement for ACPS TAG services; yet, their level of endorsement was higher than that of parents who have middle school child(ren) receiving special education services. These results can be viewed in Figure 52.

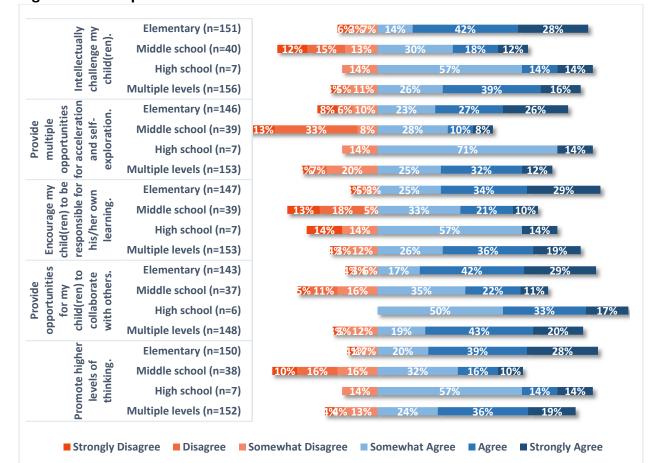


Figure 52. Perceptions of Talented and Gifted Services

Discussion

The purpose of Task 4 was to investigate the extent to which the needs of three special student populations (i.e., ELLs, SWD, and TAG students) are met in ACPS classrooms. Across all data sources, findings suggest a gap in the ACPS written curriculum to support teachers as they address the needs of ELLs, SWD, and TAG students. One approach to fill this gap is to review the written curriculum and provide more specific differentiation suggestions for the three special student populations as they relate to the content of each grade and subject area.

For ELLs, the ACPS curriculum guides provide some support to teachers to address ELL needs in terms of instructional resources, instructional strategies for special populations, and Guided/Scaffolded Transfer Tasks. However, the curriculum guides do not provide guidance on how to accommodate preassessment, diagnosis, and formative assessment for ELLs, as well as promote ELL metacognition. In focus groups, teachers' reports corroborated these document review findings indicating that instructional strategies are provided yet teachers considered these too general and expressed interest in being provided specific activities and lessons. Further, staff survey results suggest a low level of endorsement for the ACPS written curriculum to meet the needs of ELLs with the exception of high school administrators who perceived the ACPS written curriculum as providing guidance to address ELL needs. The document review revealed the Grade 8 English Curriculum Guide is a notable resource for ACPS to model other curriculum guides in that it clearly connects VA SOLs and ELD standards.

While there are numerous instructional resources integrated into the ACPS curriculum guides (i.e., Differentiation Framework, differentiation techniques, key academic vocabulary), none are identified to address the needs of SWD. Again, the Grade 8 English Curriculum Guide is an exception, providing numerous resources (i.e., web links to Reading Rockets, International Reading Association, and ReadWriteThing.org; readings; discussion frames; cooperative learning structures; and, vocabulary practice). Although not specific to SWD, some instructional strategies could benefit SWD. As with ELLs, the curriculum guides do not provide guidance on how to accommodate pre-assessment, diagnosis, and formative assessment for SWD; however, Transfer Tasks are also not addressed for SWD. Also, the metacognition strategies are not specific to SWD. In focus groups, teachers' beliefs confirmed the document review findings indicating the written curriculum does not provide adequate support to teachers in meeting the needs of SWD. Teachers reported needing to heavily modify the written curriculum or developing their own materials using resources external to ACPS. Further, staff survey results verified the teacher focus group findings in that they suggest a low level of endorsement for the ACPS written curriculum to meet the needs of SWD. As with ELL, the exception is the high school administrators who perceived the ACPS written curriculum as providing guidance to address SWD needs.

As with SWD, the instructional resources for TAG students are largely missing. Documents, such as Honors Curriculum Design Principles and Rigor and Relevance in the Honors Curriculum, are available at the secondary level; however, they do not specifically address how to meet the needs of TAG students. The Grade 5 TAG English and Math Guides are notable resources for ACPS to model other curriculum guides for TAG students, which include resources for acceleration, enhancement, and learning extensions. Additionally, the Writing Toolkit within the Grade English 8 Curriculum Guide provides differentiated instructional strategies that could be used with TAG students. As with ELLs and SWD, the curriculum guides do not provide guidance on how to accommodate pre-assessment, diagnosis, and formative assessment for TAG students. There are Accelerated/Enhanced Transfer Tasks to administer to TAG students for summative assessments. While the curriculum guides provide ideas about promoting metacognition, none are specific to TAG students. As with SWD, teachers reported needing to heavily modify the written curriculum or developing their own materials using resources external to ACPS in focus groups. Staff survey results somewhat contradict teacher focus group findings in that there was a high level of endorsement from elementary and high school administrators; however, other ACPS staff survey results coincided with teacher focus group findings in that the ACPS written curriculum does not provide guidance to meet the needs of TAG students.

Despite the limited support provided by the ACPS curriculum guides to address the learning needs of ELLs, SWD, and TAG students, the classroom observation findings across all education levels indicate teachers have planned for a variety of student learning needs and adjust their instruction to meet student needs. Coinciding with the findings of limited specific resources for formative assessment and metacognition strategies in the curriculum guides, the classroom observation findings across all education levels suggest a low level of teacher use of formative assessment data to provide students with feedback and a low level use of strategies to promote student metacognition. The exception is at the high school level where teachers used formative assessment data for student feedback purposes at a higher level than elementary and middle school.

Parents with children at all education levels within ACPS perceived ACPS as meeting the academic needs of their children with the exception of parents with child(ren) in middle school receiving special education and TAG services who reported low levels of endorsement. Parents with children at the elementary level had positive perceptions of the ACPS services provided to their child for their specific learning needs. Interpret parent survey results cautiously due to low sample sizes in some education levels and the self-report nature of receiving these ACPS services.

CHAPTER 7. TASK 5: DETERMINE THE EXTENT TO WHICH ACPS CLASSROOMS ARE RIGOROUS AND ENGAGING

Rigorous and Engaging Classrooms

Classrooms in which rigorous instruction is occurring are marked by students visibly and dynamically engaged in learning experiences that require them to think critically, creatively, and/or flexibly; educators in these classrooms facilitate the development of skills that students can apply across a variety of educational, career, and civic situations. Educators in rigorous classrooms may ask students to analyze information and recommend a course of action, compare events across historical time periods, or support a statement with data. It is important to note that rigor and difficulty are not synonymous. It might be difficult for a student to memorize the capital of each state in the United States, but this task does not require the critical thinking skills associated with rigor. To assess rigor, McREL researchers observed the types of learning tasks that students were assigned by the teacher and categorized the tasks on a four-point scale. Tasks at Level 1 required low-level skills such as recall and memorization while Level 4 tasks required highly complex skills such as conducting complex analyses across texts, examining alternative perspectives, solving math tasks that require significant reasoning, planning, developing, and thinking typically over an extended time. (See Table 1 for a description of each of the four levels.) McREL researchers also observed the questioning strategies used to probe student thinking and included questions specific to how the ACPS written curriculum supports rigorous instruction on focus group protocols and on survey items.

Engaging classrooms are also distinct in that their educators encourage active student participation in learning experiences and typically help students bridge the course content to student interests. Engaging classrooms are often characterized by student-to-student interaction such as discourse and collaboration. In classes where students are highly engaged, students might lead discussions, present information to small groups of peers, or work collaboratively on mathematical problems. Engagement is also associated with students monitoring their own progress toward class learning objectives. To assess engagement, McREL researchers noted the ways students interacted during class and tracked on- and off-task behaviors of three randomly selected students during the class observations. Researchers also looked for evidence that students were engaged in activities to help them assess their own progress toward learning objectives. Survey items, as well as questions posed during focus groups, contributed information to assess Task 5.

Commendations and Recommendations

McREL consultants and researchers noted aspects of the rigor and engagement in ACPS classrooms that are commendable as well as aspects of that could be enhanced. For data to rise to the level of a commendation or recommendation, McREL consultants and researchers looked for intersections across data sources as well as the level of endorsement on a topic from survey items and focus groups. For example, if an instructional feature was observed in a majority of classes and this same topic was highly endorsed through surveys and focus groups, the topic was considered noteworthy. Conversely, if an instructional feature was seldom observed during classroom observations and was not highly endorsed through surveys or focus groups, the topic was considered as a possible recommendation. For Task 5, student input was also considered for inclusion in the commendations and recommendations as student comments relate to their classroom experiences. Commendations and recommendations are as follows.

Commendations

- At all education levels and in the majority of classroom observations, teachers probed students thinking and reasoning; connected content and topics to why they matter to students; and adjusted their instruction to meet the needs of students. Of note, high school teachers probed their students' thinking and reasoning in 96% of the observations.
- At all education levels, students were on track for learning in at least 70% of the classroom observations. Elementary students were most on track (83%) followed by middle school students (73%) and high school students (70%).
- At the elementary level, the majority of the student tasks were at a Level 3 for cognitive complexity, indicating that students were applying deep knowledge and analytical skills to complete their assigned tasks.
- In focus groups, students reported they complete numerous projects and like learning through projects, indicating these help them think more in-depth.
- In focus groups, students also indicated they are given opportunities to revise their work based on feedback; however, how and when such revisions occur appears largely dependent upon the teacher. Allowing students an opportunity to revise their work based on formative feedback (before grades are assigned) helps students take corrective action and thus may increase the likelihood of students attaining learning objectives.
- In focus groups, students reported their teachers used real world examples to help make connections for them and support their learning. As one student summarized, "Very often real-world connections seem to really help us get better understanding."
- Across the education levels, administrators perceived the written curriculum as an aid for
 increasing classroom rigor, facilitating student engagement, and increasing relevance for students.
 Further, additional ACPS staff positions also perceived the written curriculum favorably with
 respect to rigor, engagement, and relevancy yet teacher perceptions varied across education
 levels.
- Overall, parent perceptions of rigor and student engagement in ACPS classrooms are positive with parents of elementary students having the most positive perceptions. Most parents of ACPS students had higher levels of endorsement on survey items for their children's class work over their homework.

Recommendations

- Reach a common understanding of what rigor is and what it looks like in classrooms at all education levels. This might include the development of exemplar lessons that address the needs of special student populations (ELL, SWD, and TAG). Across education levels, survey data revealed a disparity in classroom teacher and administrator perceptions of the utility of the written curriculum as an aid for enhancing rigor in the classroom. Similarly, focus group data provided differing views about the utility of the written curriculum with teachers noting the difference between rigor and difficulty. Secondary students also voiced differing views regarding the perceived challenge of classes, indicating that managing their workload actually presented the greatest challenge.
- Encourage teachers at the middle and high school levels to review student tasks for opportunities to increase cognitive complexity. Researchers noted the level of cognitive complexity in student tasks appeared to decrease as the education level increased with over 60% of the student tasks categorized as Level 2 (requires comprehension and some processing of text; using context clues, identifying/summarizing main events; and, determining operation to use to solve simple word problems) at both the middle and high school levels. These results provide an opportunity to discuss the types of student tasks implemented across education levels to further clarify the notion of rigor and what this means in ACPS classrooms.

- Provide professional development across all education levels to help teachers more effectively implement formative assessment practices. Although there is evidence that some teachers (especially high school level teachers) use formative assessment data to provide feedback to students, there is less evidence that students are engaged in the process. Ensuring that students understand learning goals for the unit and their own progress toward attaining these goals can promote student engagement and allow students to make adjustments to their learning before grades are assigned. Likewise, incorporating peer-feedback processes and promoting student metacognition will help students internalize performance criteria and assume more responsibility for their own learning. At all education levels, students tracked their own learning in 15-16% of observations. In focus groups, students reported they track grades on their own and receive teacher help if they request it. Although the written curriculum provides general guidance for how to implement formative assessment practices, the guidance is not specific to the subject or instructional unit and may not be sufficient for effective implementation. Education research on the positive outcomes associated with formative assessment practices is well-documented, but attaining these positive outcomes requires engaging students in the process.
- Provide guidance and/or professional development to build teacher capacity for implementing varying grouping structures to increase student engagement. As discussed in Task 3, the extent of alignment between the written and taught curriculum, teacher-directed whole-group instruction was the primary instructional grouping strategy utilized across education levels. For example, students reported that student-led discussions occur in English and history classes but may only occur in other classes if a student asks a question. Teachers reported there are many resources to enhance student engagement in the written curriculum yet they do not include suggestions that are specific to a grade level. Structures such as Socratic seminars, Reciprocal Teaching, Math Talk and others may increase productive student-to-student interactions during instruction.
- Build communication strategies to help middle and high school parents better understand how homework assignments and teacher feedback help their children reach academic goals. Parents of ACPS middle and high school students had lower levels of endorsement for their children's homework at 59% and 67%, respectively. Perceptions of teacher feedback varied across education levels with parents of elementary students and parents who have children in multiple education levels having the most positive perceptions at 87% and 77%, respectively, and parents of middle and high school students having less positive perceptions at 57% and 66%, respectively. In terms of their children being intellectually engaged at ACPS, parents of middle and high school students had the lowest level of endorsement with both at 66%. Communication strategies between secondary teachers and parents could include maintaining a classroom website, Facebook page, and/or blog; disseminating a class newsletter; sending emails to individual parents; and, holding weekly virtual office hours via Skype or Google Hangout. Traditional methods of communication, such as parent-teacher conferences, back-to-school nights, and phone calls, should not be overlooked.

Findings

The findings for each of the three data sources (classroom observations, focus groups with students and teachers, and surveys administered to ACPS staff and parents) are provided below.

Classroom Observations

Seven items on the observation protocol were used to inform Task 5, the extent to which ACPS classrooms are rigorous and engaging. These items are associated with instructional practices that engage students and promote student thinking. During each classroom observation, McREL researchers recorded whether these practices were observed or not observed. The instructional practices included:

- · using questioning strategies to probe student thinking,
- connecting subject content to why it matters to students,
- using formative assessment data to provide students feedback,
- adjusting instruction during the lesson to meet student needs,
- promoting student metacognition,
- · engaging students in peer-feedback processes, and
- encouraging students to monitor their own learning.

To further assess engagement, McREL researchers selected three students at random and tracked student behaviors at five-minute intervals. This strategy was incorporated to record whether student behaviors were on-track or off-track with instruction. To inform whether classrooms are rigorous, McREL researchers noted the perceived cognitive complexity of assigned student tasks. Student tasks were categorized on a four-point scale with one representing the lowest level of cognitive complexity (e.g., recall, low-level skills) and four representing the highest level of cognitive complexity (e.g., complex analyses across texts, topics, problems). Table 11 provides a description of each level of cognitive complexity. During observations, McREL researchers indicated the levels of cognitive complexity of the student tasks observed. The highest level of cognitive complexity indicated was used during analysis. Within an observation, the complexity level could change based upon the student tasks observed; Over the course of a unit of instruction, it is desirable for students to experience all four levels of cognitive complexity, however, within an individual lesson, there is no typical progression from one complexity level to the next. For the purposes of this audit, it is informative to look at the cognitive complexity of tasks within a grade band and across education levels to better understand overall student experiences with complex tasks. The classroom observation results are presented by grade band (e.g., elementary, middle school, and high school), respectively.

Table 11. Descriptions for Each Level of Cognitive Complexity for Student Tasks

Level of Cognitive Complexity	Description
Level I	Receive or recite facts. Use simple skills or abilities. Build algorithmic skill $(+, -, *, /)$. Solve a one-step equation.
Level 2	Beyond recall, requires comprehension and some processing of text. Use context clues, identify/summarize main events, determine operation to use $(+, -, *, /)$ when solving a mathematical problem, solve simple word problems.
Level 3	Deep knowledge is required. Students explain, generalize and/or connect ideas (explain author's purpose, analyze/describe characteristics). Math tasks are complex involving multiple steps and maybe abstract.
Level 4	Higher-order thinking is required. Perform complex analyses across texts, examine/explain alternative perspectives, describe/illustrate common themes. Math tasks require significant reasoning, planning, developing, and thinking typically over an extended time. Requires students to make connections across mathematics strands (number, algebra, geometry, probability).

Elementary

Forty-seven observations lasting an average of 25 minutes each were conducted in elementary classrooms. In all elementary observations, students read, talked about, or wrote about text, questions, problems, etc. (100%). In the majority of classroom observations, teachers probed student thinking and prompted them to explain their answers in greater depth; connected content/topics (geometric angles to hands on a clock, linking book themes to life events, incorporating current events) to why these topics matter to students, thereby allowing students to make personal connections to content (75%); and, adjusted their instruction for students during the lesson which allowed teachers to better meet the

needs of individual students (83%). Additionally, there was evidence teachers had planned for various student learning needs (92%). Students supported their responses with evidence from text, information learned, or previous knowledge (85%). In 32% of observations, teachers used formative assessment data to provide students with feedback which allowed students to take corrective action and to understand next steps for learning and used strategies to promote student metacognition encouraging students to reflect on how they approached a given task as well as using a KWL Chart (e.g., What I Know, What I Want to Know, and What I Learned). In less than a quarter of observations, students used a protocol to provide and receive peer feedback about the quality of their work giving students opportunities to discuss their work with peers and internalize performance criteria (21%) and monitored their learning to assess their own progress toward learning goals (15%). These results are displayed in Figure 53.

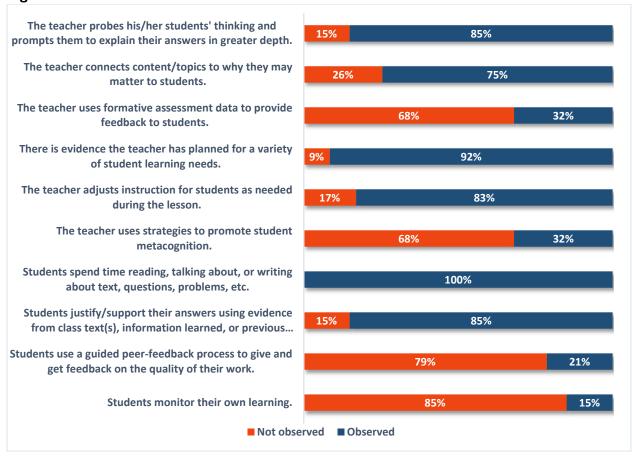


Figure 53. Classroom Instructional Features: Observed or Not Observed: n=47

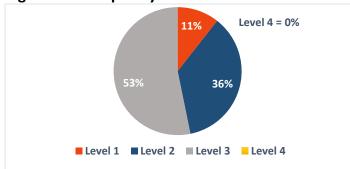
During the 47 classroom observations, the selected elementary students were on-track 83% of the occurrences in which they were examined for their engagement with teacher instruction. These results are displayed in Figure 54.

Figure 54. Percentage of Occurrences Students On- or Off-Track: n=47



Most student tasks observed at the elementary level were categorized at Level 3 for complexity. Level 3 tasks require students to explain, generalize, connect ideas, and/or solve multi-step problems. Approximately 11% of student tasks were at a Level 1 for complexity where students received or recited facts, or used simple skills or abilities. Over 36% of student tasks were at a Level 2, which requires comprehension and processing of text. Just over 53% of student tasks were at Level 3 and there were no student tasks at Level 4. It is important to note that Level 4 tasks require significant reasoning, planning, developing, and thinking typically over an extended time. It is not unusual for this task level to be incorporated in instruction less often than Levels 1 through 3. These results are displayed in Figure 55.

Figure 55. Complexity of Student Tasks: n=47



Middle School

Thirty-one observations lasting an average of 23 minutes each were conducted in middle school classrooms. In 87% of the observations, students read, talked about, or wrote about text, questions, problems, etc. In a majority of observations, teachers probed student thinking and prompted them to explain their answers in greater depth (68%); connected content/topics (relating speed, force, and power to a trick basketball shot) to why these topics matter to students (52%); and, adjusted their instruction for students during the lesson which allowed teachers to better meet the needs of individual students (74%)—though less frequently than was apparent in the elementary observations. There was evidence teachers had planned for various student learning needs (71%), but again this was at a lower level than in elementary observations. Students supported their response with evidence from text, information learned, or previous knowledge in 55% of the observations. In less than half of the classroom observations, teachers used formative assessment data to provide students with feedback (45%) and used strategies to promote student metacognition having students assess their own assignment to reflect on what they know (29%). As with the elementary classroom observations, students used a protocol to provide and receive peer feedback about the quality of their work and

students monitored their learning at low levels (19% and 16%, respectively). These results are displayed in Figure 56.

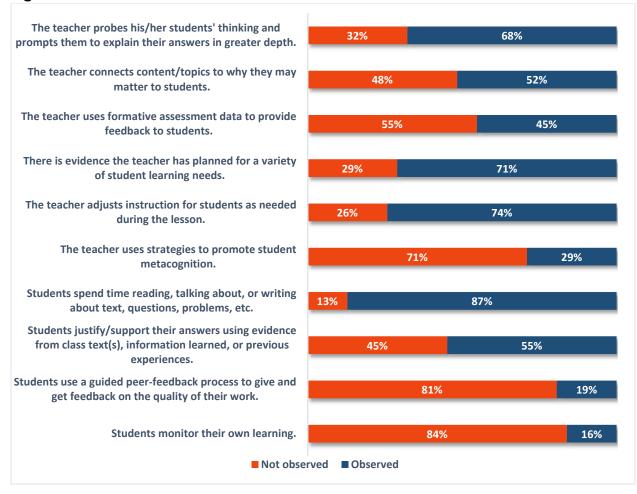


Figure 56. Classroom Instructional Features: Observed or Not Observed: n=31

During the 31 observations, the selected middle school students were on-track 73% of the occurrences in which they were examined for their engagement with teacher instruction. These results are displayed in Figure 57.

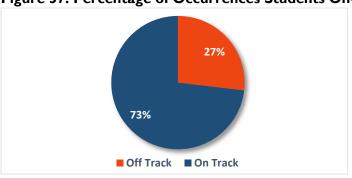
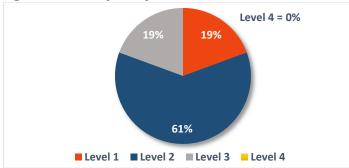


Figure 57. Percentage of Occurrences Students On- or Off-Track: n=31

The greatest percentage of middle school student tasks observed were categorized as Level 2 on the cognitive complexity scale. Level 2 tasks require students to comprehend and process text as well as solve simple word problems in mathematics. Nineteen percent of student tasks during the classroom observations were at a Level I for complexity where students received or recited facts, or used simple skills or abilities. Sixty-one percent of student tasks were at a Level 2 and 19% percent of student tasks were at Level 3. No student tasks were categorized at Level 4 for cognitive complexity. It is important to note that Level 4 tasks require significant reasoning, planning, developing, and thinking typically over an extended time. It is not unusual for this task level to be incorporated in instruction less often than Levels I through 3. These results are displayed in Figure 58.

Figure 58. Complexity of Student Tasks: n=31



High School

Twenty-six observations lasting an average of 21 minutes each were conducted in high school classrooms. As with elementary and middle school observations, students read, talked about, or wrote about text, questions, problems, etc. (96%) and, teachers probed student thinking and prompted students to explain their answers in greater depth and students supported their response with evidence from text, information learned, or previous knowledge (96%); connected content/topics to why they matter to students which allowed students to make personal connections to content (58%); and, adjusted their instruction for students during the lesson thereby allowing teachers to better meet the needs of individual students as well as the entire class (85%). At a higher level than middle school yet lower level than elementary observations, teachers had planned for a variety of student learning needs (85%). Teachers made real world connections for students by introducing the concept of a rebuttal and having students generate their own rebuttals. Students supported their response with evidence from text, information learned, or previous knowledge in 77% of the observations. Additionally, high school teachers used strategies to promote student metacognition at a higher rate than elementary and middle school teachers at 42%. Similar to elementary and middle school, students used a protocol to provide and receive peer feedback about the quality of their work (27%) and monitored their learning (15%) with relatively low frequency. These results are displayed in Figure 59.

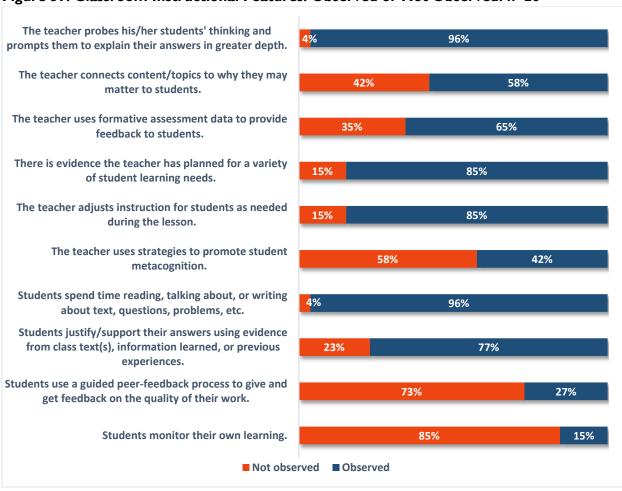


Figure 59. Classroom Instructional Features: Observed or Not Observed: n=26

During the 26 high school observations, the selected students were on-track with teacher instruction during 70% of the tracked occurrences. These results are displayed in Figure 60.

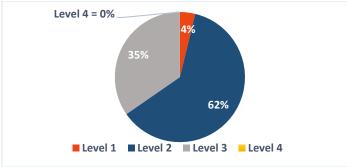


Figure 60. Percentage of Occurrences Students On- or Off-Track: n=26

The greatest percent of high school student tasks were categorized as Level 2 on the cognitive complexity scale. Level 2 tasks require students to comprehend and process text as well as solve simple word problems in mathematics. Four percent of student tasks were categorized at a Level I for complexity where students received or recited facts, or used simple skills or abilities. Sixty-two percent of student tasks were at a Level 2, and 35% of student tasks were at Level 3. There were no student

tasks categorized at Level 4 on the cognitive complexity scale. It is important to note that Level 4 tasks require significant reasoning, planning, developing, and thinking typically over an extended time. It is not unusual for this task level to be incorporated in instruction less often than Levels I through 3. These results are displayed in Figure 61.

Figure 61. Complexity of Student Tasks: n=26



Focus Groups

Several teacher and student focus group questions aligned with Task 5, the extent to which ACPS classroom are rigorous and engaging. Teacher focus group questions related to how the ACPS written curriculum helps teachers increase rigor and student engagement, and all eight student focus group questions are related to Task 5.

Teacher

As indicated above, McREL researchers conducted seven teacher focus groups with a total of 79 teachers at the elementary, middle school, and high school levels. Teachers discussed how the ACPS written curriculum helps them increase rigor and student engagement in the classroom.

Increasing Rigor

Teachers were asked how the ACPS written curriculum has helped them increase rigor in their classrooms. They reported the level of rigor varies by course subject and grade level, but also emphasized the difference between rigor and difficulty. While several teachers described the ACPS written curriculum as difficult for students, they reported the difficulty tends to arise from structural issues with the written curriculum itself rather than students being presented with challenging coursework. One teacher explained, "I've found that some of the curriculum for social studies needs to have much more background knowledge included. They just jump hundreds of years and you have to explain what happened." Teachers indicated these structural issues pose particular challenges for special student populations. "Geography with our ELL population, for example, is challenging," explained a teacher. "[ELL students] might be new to our country or have different life experiences. I have to fill in a lot of those gaps whereas some [non-ELL students] are bored with that."

Several teachers also expressed the belief that providing the appropriate amount of rigor for students is inherently a teacher's responsibility, rather than a curriculum's responsibility. These teachers explained rigor varies by student and by context and has no one-size-fits-all approach. "It all comes back to student need," a teacher elaborated. "Is this curriculum focused on the kids that I'm teaching right now! If it's too much or too little [rigor], then you have to go somewhere else." Expanding upon this statement, several teachers reported having doubts as to whether or not the needs of students were considered in developing the ACPS written curriculum. Teachers commented that colleagues in other school divisions have been involved in curriculum development and expressed a desire to see similar

steps utilized in modifying the ACPS written curriculum. "Where I came from, the teachers wrote the curriculum. It was a committee, but it was a committee of teachers with one instructional leader."

Increasing Student Engagement

Teachers were asked how the ACPS written curriculum has helped them increase student engagement in their classrooms. They indicated there are suggestions and resources throughout the ACPS written curriculum to promote student engagement, but mostly reported not finding these suggestions or resources to be particularly useful. For the most part, teachers indicated they have independently sought out external resources instead of utilizing those provided by the ACPS written curriculum. Speaking to the quality of the resources included in the ACPS written curriculum, another teacher explained, "I feel like there was an effort to include some engaging suggestions, but they're not what third through fifthgraders find engaging. A class where everyone sits still is not engaging. Again, we have to supplement and figure out what would work in our own classroom."

Student

McREL researchers conducted four student focus groups with a total of 43 students from four secondary schools. Students were asked to elaborate on 1) class discussions, 2) connections between class content and real world events, 3) challenging class assignments, 4) working with their peers, 5) whether they understand the goals for learning, 6) opportunities to monitor their progress toward learning goals, 7) opportunities to work on projects or experiments, and 8) whether they have opportunities to revise and improve upon their work.

Discussing in Class

Students were asked how often they have class discussions wherein students do a majority of the talking about what they are learning. They reported the class discussions are sometimes led by the students and sometimes by the teacher. Student-led discussions regularly occur in civics and English where they hold debates and teachers ask students to defend their statements and justify their stand. Teacher-led discussions also occur in English. Sometimes, the teacher-led discussions are initiated by the teacher, but both the teacher and students contribute to the discussion, "like interactive lectures." Students shared that in subjects like English and history, it helps if they are leading discussions since there is "lot of exploration of your own opinion." Teachers encourage students to explain their answers. For example, students are encouraged to discuss their answers on mathematics problems with other students or as a class for homework revision in Biology and Geometry. One student added the only time discussions are student-driven is when students have questions for the teachers.

Making Connections

Students were asked how often their teachers make connections between what they are learning in class and either the "real world" or what matters to students. Students reported that, depending on the subject, teachers make references to real world examples frequently, such as in English, civics, history, and science classes. Students also indicated that teachers also ask for explanations of why students believe they are learning a certain concept to make connections to current events, such as volcano eruptions.

Several examples were shared providing insight into how teachers make connections between what the students are learning in class and the "real world." One student shared an example from English, where the students wrote an essay on social media. Another student shared an example of solving math problems based on sports scenarios. One example cited from English was a reference to movies. Science examples shared were nuclear reactions, cell membrane permeability, and the connection to diseases like diabetes. As one student summarized, "Very often real-world connections seem to really help us get better understanding."

Challenging Assignments

Students reported variations in being challenged in the classes. Some cited math classes as challenging while some cited they did not feel too challenged in subjects like English and history. They indicated that class assignments can seem challenging depending on one's understanding of the subject. They also noted that teachers try to challenge them by giving elaborate quizzes, for example in English where the quiz is almost, like a "really difficult test." They explained the volume of work is what they find to be more challenging, "because we have to learn to be a lot more efficient and do a lot more work in a shorter amount of time." One student mentioned that some teachers are unable to provide help to struggling students and that is challenging, "You have one student who keeps asking the same question, and the teacher kind of gets irritated. But they'll explain it in the same way every time, which isn't really helpful."

Working with Peers

Students were asked how often their teachers give them opportunities to work with their peers to complete assignments. Students reported that group work varies by class and teacher. They perceived math as more individual work and other subjects like science as more group work. When they work in groups, they work with someone who they sit next to because it is "easier" and it "saves time," or they are assigned a partner by their teacher. One student commented that teachers assign group work to students because, "it's less work for them [teachers]" while another student noted that teachers are preparing them for future real world experiences, "because in the future we are going to be working with people we might not even know." This student added that the teachers also give them the option to work individually. Students indicated that once the group is formed, the students decide on the responsibilities and roles of the group members. Group work examples across subjects like civics and science included organizing civics terms, investigating electron shells and energy, survival of the fittest experiments, and presentations on genetically-modified organisms.

Discussing Learning Goals

Students were asked how often their teachers talk to them about their learning goals for a class. They mentioned that most teachers mention learning goals and that the majority of teachers teach to the Standards of Learning (SOL). Students indicated the learning goals are frequently only referred to at the beginning of the school year. Students shared that some teachers provided students with additional goals not focused on SOLs. On the other hand, students hear a lot of planning about learning goals in class and depending on the teacher, the learning goal displays are refreshed every week in class. One student indicated that whether or not the learning goals are discussed, "we end up learning." This student recommended that time spent on learning goals could be better spent on addressing student questions.

Students perceived teachers who did not focus strongly on the SOLs as teachers who "really cared for them." They appreciated teachers who focused on long-term career related learning goals instead of topic learning goals —these included math, science, and Reserve Officer's Training Corps (ROTC) teachers. An example of a teacher setting up a website for students to talk about careers was also shared.

Monitoring Progress Toward Learning Goals

Students were asked how often they monitor their progress toward their learning goals. Students indicated that teachers monitor their progress toward the learning goals through grades, but tend to pay more attention to students who are struggling. One student noted this depends on the teacher as his/her science teacher provides a lot of help outside class. Students alluded to a test like Northwest Evaluation Association's (NWEA's) Measures of Academic Progress (MAPS) as their own way of progress monitoring. They also use PowerSchool and Blackboard to track their own progress. One

student noted that students who want to monitor their own progress via tracking grades do it on their own, or solicit the teacher's help and the teacher provides that help, if the student requests it.

Working on Projects or Experiments

Students were asked how often their teachers give them opportunities to work on projects or experiments. They mentioned that electives, like photography and Spanish, tend to be project-based while the core subjects are less frequently project-based. Students cited a myriad of projects that they work on ranging from video projects, PowerPoint presentations, research, and labs. They indicated that in English they do projects all of the time at home to save time and sometimes they get to do science and math projects in class. One student complained that students seldom get to do projects that allow them to present, except for "National History Day and Science." Other examples of subject-specific projects are in history where students worked on a project on cities and businesses; in English where they worked on essays and class presentations about novel reading; and, in honors biology where they worked on DNA paper models. Students shared that in the STEM program they get started on a project in class, then continue working on it at home. Students appreciate projects as one student noted, "in each project, we are able to fill certain skills and apply our learning" and another commented, "I very much enjoy the projects."

Revising Work

Students were asked how often their teachers encourage them to revise their work so it is of the highest quality possible. Students indicated they have a variety of opportunities to revise their work in different subjects. For example, some teachers give opportunities to students to go over homework and make corrections while other teachers let students retake the test and make improvements to their grade. Although teachers let the students redo the tests, it depends on whether the student has a grade below C as to whether there is an opportunity to retake. Students shared examples of revising their work in Geometry and English subjects. In Geometry, they revise their work in class as they are doing it based on whole class discussions. In English writing assignments, students utilize peer help as they proofread each other's work, share ideas, and seek clarifications on the assignments.

Additional Comments

Students were invited to provide additional comments or feedback about their classes. Students mentioned that when teachers make the classes fun, relatable, involve more discussions with peers, and give occasional breaks to students in class, students pay more attention. Finally, students noted some teachers have a set plan in mind of how they are going to teach and just follow that instead of pacing it according to student needs.

Surveys

A number of staff and parent survey items aligned with Task 5. Staff survey items related to how the ACPS written curriculum helps teachers increase rigor in the classroom, facilitate student engagement in the content, and connect content to real world application or increase relevance to students. Parent survey items aligned with Task 5 related to their children's class and homework assignments being meaningful, teachers providing their children with feedback, and their perceptions of whether their children were intellectually engaged at ACPS.

Staff

Across ACPS, 547 staff members responded to the survey³. Over half of the respondents represent the elementary level with elementary classroom teachers representing 31% of the total number of ACPS respondents. As with the classroom observation results, survey results are provided by education level.

³ Respondents only completed survey items related to their ACPS position, so not every position answered all survey items.

Elementary

At the elementary level, administrators had the highest endorsement (82%) to the question "The ACPS curriculum helps increase rigor (e.g., higher-order thinking, challenging learning environment) in the classroom" while classroom teachers had the lowest endorsement (49%) of this same question. For the question, "The ACPS curriculum helps facilitate student engagement in the content," administrators also had the highest endorsement (71%) while classroom teachers had the lowest (43%), followed by content specialists and instructional coaches (45%). In regard to the question, "The ACPS curriculum helps connect content to real world application or increase relevance to students," administrators again had the highest endorsement (71%), and those who selected "Other" and ELL teachers having the lowest endorsement (50%), followed by classroom teachers, content specialists, and instructional coaches (both 51%). The positions of those who selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 62.

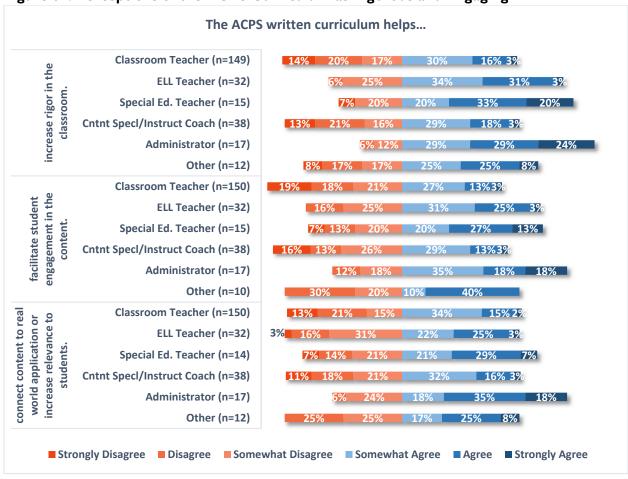


Figure 62. Perceptions of the ACPS Curriculum as Rigorous and Engaging

Middle School

Special education teachers had the highest endorsement (100%) to the question "The ACPS curriculum helps increase rigor (e.g., higher-order thinking, challenging learning environment) in the classroom" while classroom teachers had the lowest endorsement (53%). For the question, "The ACPS curriculum helps facilitate student engagement in the content," special education teachers again had the highest endorsement (75%) while content specialists/instructional coaches (28%) had the lowest, followed by

classroom teachers (52%). In regard to the question, "The ACPS curriculum helps connect content to real world application or increase relevance to students," content specialists and instructional coaches had the highest endorsement (100%), and those who selected "Other" had the lowest endorsement (28%), followed by administrators (58%). The positions of those that selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 63.

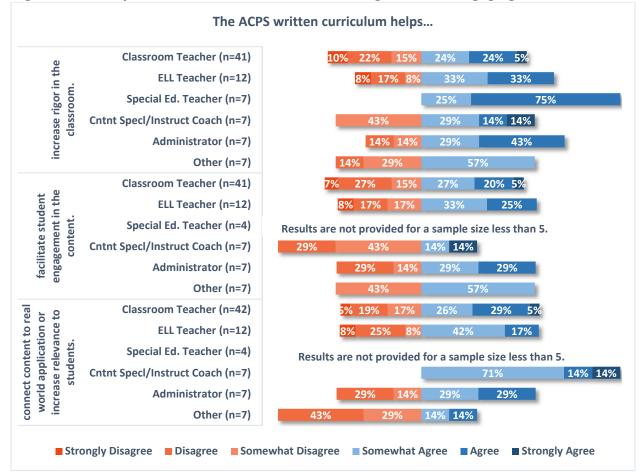


Figure 63. Perceptions of the ACPS Curriculum as Rigorous and Engaging

High School

Administrators had the highest endorsement (100%) to the question "The ACPS curriculum helps increase rigor (e.g., higher-order thinking, challenging learning environment) in the classroom" while classroom teachers had the lowest endorsement (53%). For the question, "The ACPS curriculum helps facilitate student engagement in the content," administrators again had the highest endorsement (70%) while classroom teachers had the lowest (47%), followed by ELL teachers (50%). In regard to the question, "The ACPS curriculum helps connect content to real world application or increase relevance to students," administrators had the highest endorsement (90%), and classroom teachers had the lowest endorsement (52%) followed by special education teachers (54%). The positions of those that selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 64.

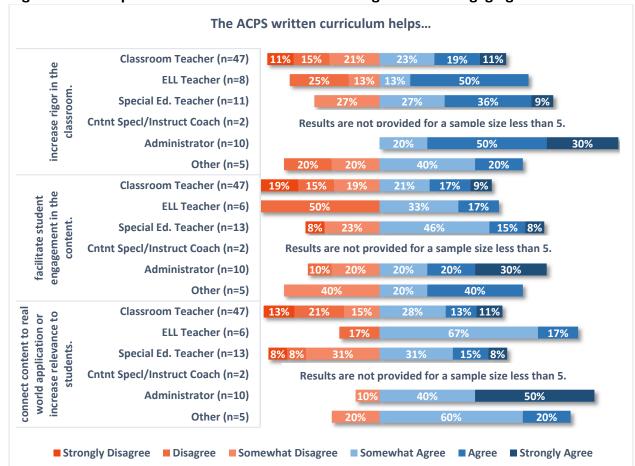


Figure 64. Perceptions of the ACPS Curriculum as Rigorous and Engaging

Parent

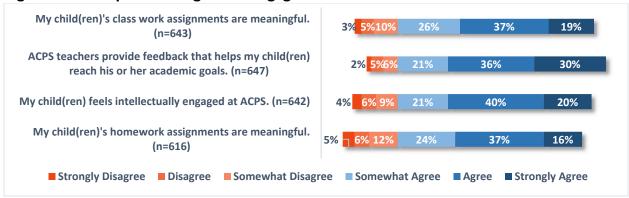
Parents responded to questions about their children's class and homework assignments being meaningful, their perceptions on the academic feedback that teachers provide their children, and perceptions on whether their children feel intellectually engaged at ACPS. Results are provided by parents who have children at one education level (i.e., elementary, middle school, or high school) in ACPS and parents who have children at multiple education levels (i.e., elementary, middle school, and/or high school). For parents with children at one education level, results are displayed by education levels. For parents with children at multiple education levels, results are displayed with all education levels aggregated.

Child(ren) at One Education Level

Elementary

Parents who have child(ren) in an ACPS elementary school had high levels of endorsement for survey items related to rigor and student engagement in ACPS classrooms. Parents had the highest level of agreement for the item "ACPS teachers provide feedback that helps my child reach his or her academic goals" at 87%. Parents had the lowest level of agreement for the item "My child's homework assignments are meaningful" at 77%. These results can be reviewed in Figure 65.

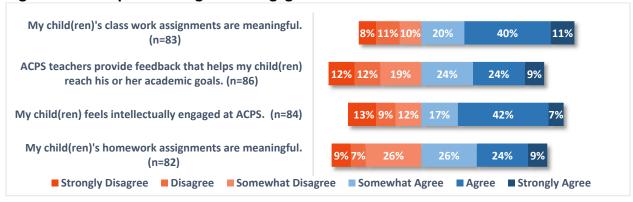
Figure 65. Perceptions of Rigor and Engagement in ACPS Classrooms



Middle School

Parents who have child(ren) in an ACPS middle school had moderate to high levels of endorsement for survey items related to rigor and student engagement in ACPS classrooms. Parents had the highest level of agreement for the item "My child's class work assignments are meaningful" at 71%. Parents had the lowest level of agreement for the item "My child's homework assignments are meaningful" at 59%. These results can be reviewed in Figure 66.

Figure 66. Perceptions of Rigor and Engagement in ACPS Classrooms



High School

Parents who have child(ren) in an ACPS high school had moderate to high levels of endorsement for survey items related to rigor and student engagement in ACPS classrooms. Parents had the highest level of agreement for the item "My child's class work assignments are meaningful" at 72%. Parents had the lowest level of agreement for the items "ACPS teachers provide feedback that helps my child(ren) reach his or her academic goals" and "My child(ren) feels intellectually engaged at ACPS" both at 66%. These results can be reviewed in Figure 67.

My child(ren)'s class work assignments are meaningful. % 13% 11% 25% 16% (n=106)ACPS teachers provide feedback that helps my child(ren) 26% 11% 9% 16% reach his or her academic goals. (n=105) My child(ren) feels intellectually engaged at ACPS. (n=105) 5% 11% 25% 21% My child(ren)'s homework assignments are meaningful. 26% 11% (n=97)■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree

Figure 67. Perceptions of Rigor and Engagement in ACPS Classrooms

Child(ren) at Multiple Education Levels

Parents with children at multiple education levels had high levels of endorsement for survey items related to rigor and student engagement in ACPS classrooms. Parents had the highest level of agreement for the item "ACPS teachers provide feedback that helps my child(ren) reach his or her academic goals" at 77%. Parents had the lowest level of agreement for the item "My child(ren)'s homework assignments are meaningful" at 72%. These results can be reviewed in Figure 68.

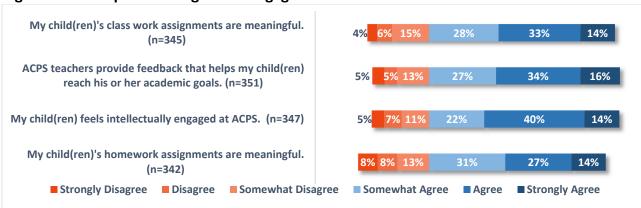


Figure 68. Perceptions of Rigor and Engagement in ACPS Classrooms

Discussion

The purpose of Task 5 was to assess the level of rigor and student engagement in ACPS classrooms and the degree to which the ACPS written curriculum supported teachers in enhancing rigor and engagement. Classroom observations provided evidence of some indicators of rigor (i.e., use of questions to probe students thinking and, at the elementary level, the majority of student tasks categorized at Level 3 for cognitive complexity) and student engagement (i.e., connecting content and topics to student interests and adjusting instruction to meet student needs). However, ACPS staff perceptions regarding the extent to which the ACPS written curriculum assists teachers with increasing rigor and student engagement diverged based on ACPS staff role. For example, survey and focus group findings suggest ACPS administrators perceived the ACPS written curriculum as aiding in rigor and engagement while ACPS classroom and ELL teachers perceived the ACPS written curriculum as less helpful in assisting them with increasing rigor and student engagement in their classrooms.

Specifically related to rigor, classroom observation findings suggest a high level of teachers' infusion of rigor into their classrooms. This was demonstrated through the teacher asking probing questions of the students to get them to think more deeply about the content. Teachers demonstrated this behavior at high levels across elementary (85%), middle school (68%), and high school (96%). In terms of rigor related to the cognitive complexity of student tasks, 53% of the student tasks at the elementary level were at a Level 3 for cognitive complexity, indicating that students were applying deep knowledge and analytical skills to complete their assigned tasks. However, at the middle school and high school levels, the majority of observed student tasks were at a Level 2 for cognitive complexity (61% and 62%, respectively). Level 2 tasks require students to comprehend and process text as well as solve simple word problems in mathematics, and—although this level of complexity might be appropriate for the lessons—these observation findings provide an opportunity to discuss the types of student tasks implemented across education levels to further clarify the notion of rigor and what this means in ACPS classrooms.

The classroom observation findings counter some ACPS staff statements reported during focus groups and on surveys. While ACPS administrators perceived the ACPS written curriculum as aiding in rigor, ACPS classroom teachers perceived the ACPS written curriculum as less helpful for increasing rigor in their classrooms. In focus groups, teachers reported rigor within the ACPS written curriculum varies by subject and grade level and students reported being challenged in some subjects (i.e., mathematics) but not others (i.e., English and history). Teachers also reported the structure of the ACPS written curriculum makes the work difficult for students, but not necessarily rigorous. Survey findings for ACPS staff also highlight the difference in perceptions between administrators and teachers. At all education levels, administrators perceived the ACPS written curriculum as helping increase rigor in the classroom with at least an 82% endorsement while classroom teachers perceived the contribution of the curriculum at a maximum of 53% endorsement. This is a 29 percent point difference in perception between ACPS administrators and classroom teachers. Despite the low level of endorsement in terms of rigor, the classroom observations suggest classroom teachers still infuse rigor into their instruction.

Specifically related to student engagement, classroom observations suggest a high level of teachers' infusion related to some aspects of student engagement into their classrooms. For example, teachers connected content and topics to why they matter to students and adjusted their instruction to meet the needs of students at high levels across elementary (75% and 83%), middle school (52% and 74%), and high school (58% and 85%) while teachers used strategies to promote student metacognition at low levels across elementary (21%), middle school (29%), and high school (42%). Teacher behavior varied across education levels with respect to using formative assessment data to provide feedback to students, with elementary and middle school teachers exhibiting this at a low level in observations (32% and 45%, respectively) and high school teachers exhibiting this at a high level in observations (65%).

As with rigor, classroom observation findings counter some ACPS staff statements reported in focus groups and surveys about engagement. In focus groups, teachers reported the ACPS written curriculum does not help them enhance student engagement despite the multitude of resources and suggestions in the written curriculum. In surveys, ACPS administrators perceived the ACPS written curriculum as aiding in student engagement while ACPS classroom and ELL teachers, content specialists, and instructional coaches perceived the ACPS written curriculum as less helpful for engaging students because it is cumbersome. At all education levels, administrators perceived the ACPS written curriculum as helping increase student engagement in the classroom with at least an 75% endorsement while classroom and ELL teachers, content specialists, and instructional coaches perceived this at a maximum of 52% endorsement. This is 23 percent point difference in perception between ACPS administrators and teachers.

In terms of the ACPS written curriculum connecting content to application to enhance relevancy to students, this varied across ACPS staff position and education level. For example, elementary and high school administrators as well as middle school content specialists/instructional coaches endorsed this at a high level (71%, 90%, and 100%, respectively). However, elementary ELL and classroom teachers, elementary and middle school content specialists and instructional coaches, and high school classroom teachers had low levels of endorsement. Despite these findings, during focus groups, students reported their teachers used real world examples to help make connections and support their learning.

Depending on the aspect of engagement in their own learning, student behavior varied in ACPS classrooms. Observations of how students use a peer feedback process to give and get feedback on the quality of their work and monitor their own learning revealed these behaviors at a low level across elementary (21% and 15%), middle school (19% and 16%), and high school (27% and 15%). In focus groups, students reported they track grades on their own and receive teacher help if requested. However, students were on track with teacher instruction at high levels across elementary (83%), middle school (73%), and high school (70%) during classroom observations.

Overall, parent perceptions of rigor and student engagement in ACPS classrooms are positive. Parents of elementary students had the most positive perceptions, parents of students in multiple education levels having the next most positive perceptions, followed by parents of high school students, and lastly parents of middle school students. Overall, most parents of ACPS students had higher levels of endorsement for their children's class work over their homework. Perceptions of teacher feedback varied across education levels with parents of elementary students and parents of students in multiple education levels having the most positive perceptions. In terms of their children being intellectually engaged at ACPS, parents of middle and high school students had the lowest level of endorsement at 66%.

CHAPTER 8. TASK 6: DETERMINE THE EXTENT TO WHICH THE SUPPORTED CURRICULUM MEETS THE NEEDS OF DIVISION AND SCHOOL STAFF TO IMPROVE STUDENT LEARNING

Supported Curriculum

After the written and tested curricula are developed, instructional staff and administrators need support for effective implementation of the curriculum. This support may occur through professional development activities planned by central office staff or through activities initiated at the school. The purpose of Task 6 is to determine the extent to which the supported curriculum meets the needs of instructional staff and administrators to implement the written and tested curriculum. To inform Task 6, McREL researchers gathered information about the division-provided professional development as well as perceptual data from focus groups and surveys.

Commendations and Recommendations

McREL consultants and researchers noted aspects of the ACPS-provided professional development on the written curriculum that are positive as well as aspects of the ACPS-provided professional development that can be improved. For data to rise to the level of a commendation or recommendation, McREL consultants and researchers looked for intersections across data sources as well as the level of endorsement on a topic from survey items and focus groups. For example, if a survey item was rated favorably by teachers and this same topic was highly endorsed through focus groups, the topic was considered noteworthy. Additionally, if a survey item was rated unfavorably by teachers and was not highly endorsed through focus groups, the topic was considered as a possible recommendation. Commendations and recommendations are noted below.

Commendations

- During the 2011–2012 rollout year of the ACPS written curriculum, ACPS provided many
 professional development opportunities to ACPS staff. ACPS has continued to provide
 professional development opportunities since the initial roll-out of the ACPS written curriculum.
- Teachers and administrators perceived the support they received from curriculum specialists, content specialists, and instructional coaches as beneficial.
- The majority of classroom teachers, content specialists, and instructional coaches perceive the support materials for the written curriculum to be helpful in planning and delivering instruction.
- Most ACPS staff perceive the written curriculum to be easily accessible from Blackboard.
- ACPS-provided professional development on the written curriculum was attended by
 elementary staff most often. Elementary and high school staff who attended the ACPS-provided
 professional development on the written curriculum believed it was a good use of their time
 while middle school staff who attended the ACPS-provided professional development on the
 written curriculum believed it enhanced their understanding of how to implement the
 curriculum in their subject area.

Recommendations

• Dedicate time for ACPS staff to attend professional development and advertise broadly. Administrators noted teacher professional development time, which is provided by the division, has been taken away to make up for missed school days such as snow days.

Additionally, across all education levels, those ACPS staff who did not attend professional development indicated that the professional development did not fit with their schedule or they did not know it was offered. To help staff be aware of offerings, advertise the professional development opportunities many times and in many ways (i.e., staff newsletters, emails, posted in staff break rooms) across the division.

- Develop a defined process to support effective implementation of the ACPS curriculum. The process should include how curriculum specialists, content specialists, and instructional coaches deliver services to support implementation, including ongoing activities and communication to all stakeholders. While teachers and administrators indicated the support they receive from curriculum specialists, content specialists, and instructional coaches is beneficial, it is received informally based on a request from a school and the curriculum specialists', content specialists', and instructional coaches' time is limited. Formalizing this support structure will help instructional staff and administrators be more aware of what support is available and how it can be accessed.
- Utilize a collaborative, ongoing teacher structure (i.e., mentoring for new teachers, professional learning communities for veteran teachers) to enhance teacher knowledge and skills for implementing the ACPS written curriculum. Teachers indicated that curriculum-focused professional development was a one-time occurrence rather than an ongoing activity.
- Collaborate with school administrators and instructional staff to identify how implementation of the curriculum will be monitored. Administrators reported needing support on how to monitor implementation of the written curriculum. Data are at the heart of monitoring implementation of any education initiative, and following a systematic process for using data to make decisions about implementation contributes to the quality of those decisions. A data-informed decision making process can be used at any level—division, school, team, or individual—to make decisions about the implementation of the ACPS written curriculum. If the process is used consistently over time, at different levels within ACPS, it becomes a way of thinking and an important asset in creating a culture of inquiry. Actions involved in planning for monitoring (and adjusting) implementation include:
 - Establish clear targets for implementation
 - o Determine which data will be needed
 - o Establish a timeline for monitoring implementation
 - Determine who will oversee the monitoring process
 - o Determine how decisions will be made about adjustments
- Provide professional development opportunities for all ACPS positions that are differentiated and customized to the various responsibilities of each ACPS position. ACPS staff reported that professional development focused on general "how to" issues such as how to access the curriculum from Blackboard and how to locate online resources. Although useful information, this type of information may be better provided through an online learning module that is available for staff on a continuous basis. ACPS staff indicated that it would be useful to have professional development that is focused on issues specific to the content and/or through the lens of a staff member's position (i.e. Special Education teacher, ELL teacher, School Administrator). For example, offer professional development for school leaders that focuses on instructional leadership for implementing the ACPS curriculum. Offer professional development for instructional staff on how to implement key components of the curriculum (i.e., how to integrate formative assessment practices, how to use the Transfer Tasks to monitor student

learning). Use data, including staff input, to determine professional development needs and offerings (i.e., staff surveys, personnel evaluations, student achievement).

Findings

The findings for each of the three data sources are provided below: professional development documents, focus groups with teachers and administrators, and surveys administered to ACPS staff. Focus group and survey findings offer some diverging results, which may need additional data collection to dig deeper into the specific topic areas discussed below.

Professional Development Documents

As previously noted, ACPS provided McREL with three professional development documents related to the ACPS written curriculum: the 2010–2012 ACPS Curriculum Professional Development Plan, the 2013 to Present ACPS Curriculum Professional Development Plan, and a data file with information on professional development provided between the 2009–2010 school year and the current 2015-2016 school year. The data file included the number of attendees at the numerous ACPS-provided professional development course offerings. The data file did not include information about professional development purpose, objectives, agenda, or intended audience. These limitations may be due in part to a transition to a new professional development data management system. Tables 12 through 18 provide information on the number of ACPS staff who attended professional development courses for each school year between 2009–2010 and 2015–16. The 2011–2012 ACPS-provided professional development course, ACPS Curriculum Professional Development Modules, had the greatest staff attendance.

Table 12. ACPS-Provided Professional Development in the 2009-2010 School Year

Course	Number of Attendees
21st Century Curriculum Institute	44
MYP Assessment Overview for Administrators and Curriculum Specialists	14
Promoting Alternative Thinking Strategies (PATHS) Curriculum Training: New Teachers Only	36
TOTAL	94

Table 13. ACPS-Provided Professional Development in the 2010-2011 School Year

Course	Number of Attendees
Curriculum Maps Revision Leadership Team	6
End in Mind Curriculum Design: Unpacking Stage II Assessment	27
K-5 Collegial Curriculum Circle	19
Kindergarten Curriculum Map Project	30
SAS Curriculum Pathways	4
World Languages Writing Project	9
TOTAL	95

Table 14. ACPS-Provided Professional Development in the 2011–2012 School Year

Course	Number of Attendees
ACPS Curriculum Professional Development Modules	387
Early Childhood Curriculum Implementation	17
IB/CTE Curriculum Mapping	10
Singing to Learn: A Multicultural Approach to Early Childhood Curriculum	I
Teaching ESL Students in Mainstream Classrooms: Language in Learning Across the Curriculum	16
Curriculum Differentiation Module	~25
TOTAL	~456

Table 15. ACPS-Provided Professional Development in the 2012-2013 School Year

Course	Number of Attendees
Curriculum Focus Group	17
HOM Connections in the ACPS Curriculum	13
TOTAL	30

Table 16. ACPS-Provided Professional Development in the 2013–2014 School Year

Course	Number of Attendees
Curriculum Writing – World Languages and Social Studies	19
Science Vertical Curriculum Meeting	I
Unpacking the Curriculum – Elementary Teachers	16
Unpacking the Curriculum – Secondary Teachers	6
Navigating the English Language Development (ELD) Curriculum	~40
Navigating the English for Academic Purposes (EAP) Curriculum	~20
TOTAL	~102

Table 17. ACPS-Provided Professional Development in the 2014–2015 School Year

Course	Number of Attendees
ACPS Science Curriculum	40
Aligning the Curriculum Guides to Big Ideas	15
Core Knowledge Evaluation of Curriculum and Practice	32
Beyond LD [Learning Disability] – Supporting Students with Moderate to Severe Disabilities in the Inclusive Class through Modifications of the Curriculum	12
UDL [Universal Design for Learning] Co-Teaching Cadre – Strategies for Insuring Access to Curriculum for All Learners	50
Unpacking the English Language Development (ELD) Curriculum	~30
Unpacking the English for Academic Purposes (EAP) Curriculum	~20
TOTAL	~199

Table 18. ACPS-Provided Professional Development in the 2015-2016 School Year

Course	Number of Attendees
4 th Grade Putting it into Practice: Planning and Implementing the Math Curriculum Guides	23
ELD Curriculum Overview	8
Hidden Curriculum	4
Putting it all Together: Unpacking the Standards and the Curriculum Guides	81
Social Studies Honors Curriculum	24
UDL [Universal Design for Learning] Co-Teaching Cadre – Strategies for Insuring Access to Curriculum for All Learners	26
ELD/EAP Curriculum: Formative Assessment and the WIDA Writing Rubric	~60
TOTAL	~226

Tables 19 through 22 provides information on the number of ACPS staff who attended professional development courses across multiple years between 2009–2010 and 2015–2016. For these courses, there were multiple sessions across the specified school years.

Table 19. ACPS-Provided Professional Development in the 2012–2013 to 2014–2015 School Years

Course	Number of Attendees
Science Vertical Curriculum Meeting PK-5	35
TOTAL	35

Table 20. ACPS-Provided Professional Development in the 2012-2013 to 2013-2014 School Years

Course	Number of Attendees
Science Vertical Curriculum Meeting 6-12	14
TOTAL	14

Table 21. ACPS-Provided Professional Development in the 2012–2013 to 2013–2014 School Years

Course	Number of Attendees
Biliteracy Curriculum Development	22
TOTAL	22

Table 22. ACPS-Provided Professional Development in the 2012–2013 to 2013–2014 School Years

Course	Number of Attendees
Young Scholars Summer Curriculum Training	17
TOTAL	17

Focus Groups

Numerous teacher and administrator focus group questions aligned with Task 6. Teacher focus group questions are related to division-provided professional development on the ACPS written curriculum. Administrator focus group questions address the division-provided, curriculum-focused professional development for division leaders.

Teacher

McREL researchers conducted seven teacher focus groups with a total of 79 teachers at the elementary, middle, and high school levels. Teachers were asked to describe opportunities for professional development and their experiences with those opportunities, as well as identify additional supports that would help them implement the ACPS written curriculum.

Attending Division-Provided Professional Development

Teachers were asked if they attended a division-provided professional development session focused on the implementation of the ACPS written curriculum as well as follow up questions about how the professional development helped them. Teachers indicated they received limited opportunities to participate in curriculum-focused professional development, with several teachers reporting it had been years since they last attended any form of professional development on the ACPS written curriculum. Teachers who did attend professional development on the ACPS written curriculum indicated it focused on the technical aspects of the platform (i.e., Blackboard) used to maintain the ACPS written curriculum materials rather than using the ACPS written curriculum for instruction. Teachers indicated ACPS curriculum-focused professional development sessions were generally too long and ultimately not very useful. Teachers also indicated that curriculum-focused professional development offered to date had been difficult to attend due to scheduling conflicts, though most indicated that such opportunities had simply not been available.

Teachers who reported having recently attended professional development or otherwise interacting with ACPS curriculum specialists indicated they found these opportunities to be beneficial. They specifically praised the supportiveness of curriculum specialists, characterizing them as proactive and responsive. Teachers explained interactions and professional development with curriculum specialists have been largely informal in nature, however, and suggested that formalizing these professional development opportunities would help to address inconsistencies across schools.

Suggesting Additional Supports

Teachers were asked about additional support they needed to implement the ACPS written curriculum, and they identified several supports they feel would be helpful. Suggested supports included making shortened, streamlined, and consistent professional development sessions available for teachers, formalizing the relationship between teachers and curriculum specialists, focusing professional development more on curriculum implementation and less on how to access the curriculum guide, and setting up a formal mentoring program through which new teachers can become more familiar with the ACPS written curriculum.

Administrator

As previously indicated, McREL researchers conducted two administrator focus groups consisting of 17 participants. Eleven of the 17 participants (65%) were either elementary principals or assistant principals. During these focus groups, participants discussed 1) helping teachers implement the written curriculum, 2) how the division-provided professional development supports administrators and teachers, and 3) additional supports needed to implement the written curriculum.

Helping Teachers Implement the Written Curriculum

Administrators were asked if there is a staff member at the school responsible for helping teachers implement the written curriculum. Administrators spent time talking about the support teachers are given to implement the written curriculum. In particular, administrators focused on instructional specialists and coaches. Administrators felt that ACPS instructional specialists and coaches were extremely helpful in supporting teachers. This was echoed by one administrator who said "I've found that the [content area] person has been open to providing support, on-site support on anything that we

need; [the content area person is] extremely responsive." Administrators did point out, however, that these supports are limited due to the small number of coaches in ACPS.

This theme of having only limited access to these supports was affirmed by other administrators. Administrators would like more staff dedicated to helping teachers implement the curriculum. At the moment, instructional specialists and coaches are overburdened with many schools to serve.

Professional Development Provided to School Administrators

Administrators were asked about division-provided professional development designed to help them understand the expectations for implementing the written curriculum. Administrators were unable to reference a professional development session regarding implementation of the written curriculum. Administrators did explain that professional development opportunities are often limited and usually removed from the ACPS agenda to compensate for unplanned school closures, such as snow days. As one administrator explained "We really have very limited opportunity to grow as professionals with the current construct. Nobody says, "You're going to get X number of days. Here's the ASCD conference, three principals can go." I mean there's no budget for it, no structure to support it."

In general, professional development would be viewed as more helpful if it related to the specific needs of the school regarding written curriculum implementation. As one participant noted "Frequently not differentiated and frequently required. But, by the same token, there are people who really need to go."

Professional Development Provided to Teachers

Administrators were asked if teachers at their schools attended ACPS-provided professional development focused on implementing the written curriculum. Administrators explained that professional development for teachers had been inconsistent. Often, new teachers will attend a professional development or training regarding the written curriculum. This training, however, is very dense and often delivered over a day or two, which makes the information about the curriculum difficult to remember. As one administrator explained "when we talk about PD, we're often talking about something that happens over the summer...reactionary and it's a one-day session or a couple-hour session and then move on."

Administrators also explained that when professional development is offered on the written curriculum, it is at risk of being cut from schedules due to unforeseen circumstances. For instance, during snow closures, professional development opportunities are usually cut to accommodate the missed school days.

More time for professional development regarding the written curriculum would be helpful, beyond the current two days allotted by ACPS. With extra professional development time, information about the written curriculum could be spread out, making it easier to digest for teachers. At the moment, however, administrators felt that ACPS simply does not offer enough time for professional development. This sentiment was echoed by one participant who stated "For every single licensed professional you have; you have two professional days. That's not enough for me in terms of having my grade levels effectively do those data analysis meetings and figure out what needs to be re-looped and re-taught."

Other Support Needed to Implement the Written Curriculum

As mentioned previously, administrators felt that more support from instructional specialists and coaches would be of great help. One administrator stated, "The coaches could help unpack a lot of things." Administrators indicated that more support for monitoring how the curriculum is used and whether it is appropriate for the grade and subject area would be valuable. Administrators also indicated

that it would be beneficial for ACPS division staff to visit schools more often so they might gain a better understanding of what works and what might need to be improved.

Surveys

Many staff survey items aligned with Task 6. Staff survey items related to whether support materials in the ACPS written curriculum are helpful for planning and delivering instruction (e.g., online resources), whether resource materials provided by ACPS (e.g., textbooks) are aligned with the curriculum, and whether the curriculum is accessible from Blackboard. Survey questions also asked whether staff had participated in curriculum-focused professional development and about staff perceptions of the professional development.

Staff

Five-hundred forty-seven (547) ACPS staff responded to the survey. Over half of the respondents represent the elementary level with elementary classroom teachers representing 31% of the total number of ACPS respondents. Further, respondents only completed survey items related to their ACPS position, so not every position answered all survey items.

Elementary

When asked whether support materials in the ACPS written curriculum are helpful for planning and delivering instruction and whether the resource materials are aligned with the curriculum, elementary teachers, content specialists, and instructional coaches responded positively. The majority of classroom teachers (61%), content specialists, and instructional coaches (59% and 57%, respectively) endorsed these questions. These results can be reviewed in Figure 69.

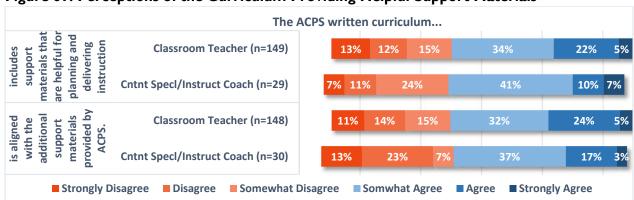


Figure 69. Perceptions of the Curriculum Providing Helpful Support Materials

All respondents were asked to reflect on the accessibility of the ACPS written curriculum through Blackboard; this item was endorsed at the highest rate by administrators (88%). Those who selected the job title of "Other" had the lowest endorsement rate at 69%. The positions of those who selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that not all respondents provided their "other" position. These results can be reviewed in Figure 70.

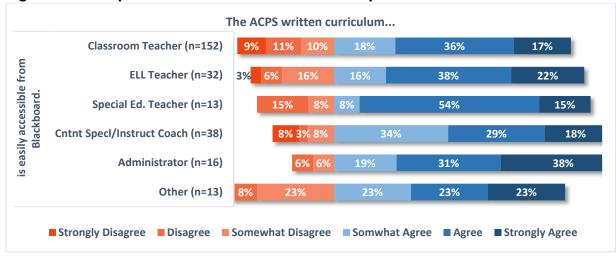


Figure 70. Perceptions of the Curriculum Accessibility

All staff were asked whether they attended professional development offerings related to the ACPS written curriculum, and most staff reported they had attended ACPS professional development on the written curriculum. Content specialists and instructional coaches attended at the highest rate (61%) while special education teachers attended the professional development at the lowest rate (35%). The positions of those who selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that not all respondents provided their "other" position. These findings can be reviewed in Figure 71.

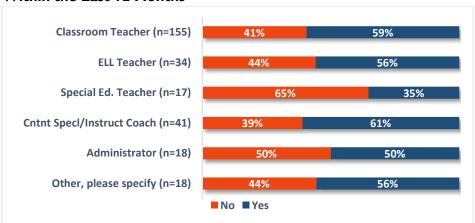


Figure 71. Attendance at ACPS Written Curriculum-Focused Professional Development Within the Last 12 Months

When asked, "What was the primary reason that prevented you from attending the professional development," the most commonly provided reason was "It did not fit with my schedule," followed by "I did not know it was offered." The positions of those who selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that all respondents did not provide their "other" position. "Other" reasons for not attending professional development included: new hire, busy with other commitments, and no professional development offered for my content area. These results can be reviewed in Figure 72.

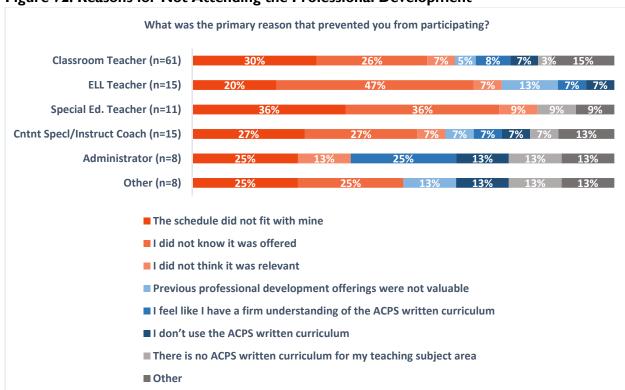
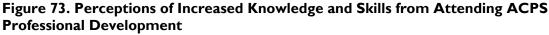
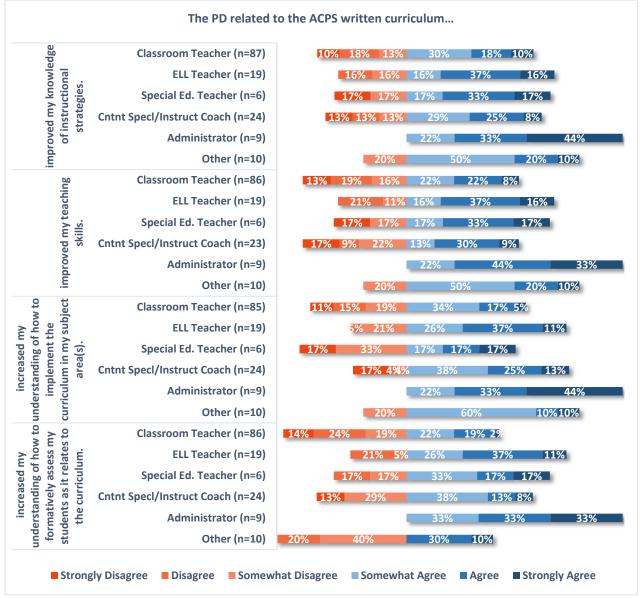


Figure 72. Reasons for Not Attending the Professional Development

Elementary school staff responded to questions regarding the perceived quality of the professional development in enhancing their knowledge and skills. For the item, "The PD related to the ACPS written curriculum improved my knowledge of instructional strategies", administrators had the highest level of endorsement at 100% while classroom teachers had the lowest level of endorsement at 65%. For the item, "The PD related to the ACPS written curriculum improved my teaching skills," administrators again had the highest level of endorsement at 100% with classroom teachers, content specialists, and instructional coaches having the lowest level of endorsement at 52%. For the item, "The PD related to the ACPS written curriculum increased my understanding of how to implement the curriculum in my subject area(s)." administrators again had the highest level of endorsement at 100% with special education teachers having the lowest level of endorsement at 51%. The question with the lowest endorsement was "The PD related to the ACPS written curriculum increased my understanding of how to formatively assess my students as it relates to the curriculum." with 40% (those who selected "other" as their position) and 43% (classroom teachers) to 99% (administrators) endorsement across staff. The positions of those who selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that all respondents did not provide their "other" position. These results are provided in Figure 73.





Elementary school staff responded to questions regarding ACPS professional development. The question with the highest endorsement from staff was "The PD related to the ACPS written curriculum was a good use of my time" from 65% (classroom teachers) to 100% (administrators and those selecting "other"). For the item, "The PD related to the ACPS written curriculum included follow up opportunities for ongoing assistance," administrators again had the highest level of endorsement at 100% with teachers and those who indicated "other" having the lowest level of endorsement at 60%. The positions of those that selected "Other" included: ENCORE teacher, gifted education teacher, art teacher, band teacher, music teacher, physical education teacher, test coordinator, and school improvement coach; please note that not all respondents provided their "other" position. These results can be reviewed in Figure 74.

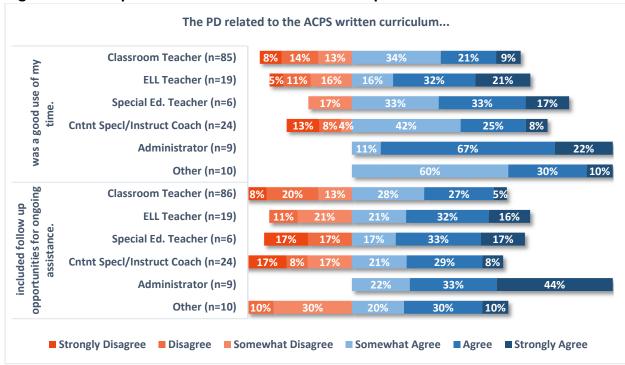


Figure 74. Perceptions of ACPS Professional Development

Middle School

ACPS staff were asked about their perceptions of the ACPS written curriculum providing helpful support materials for instruction. The majority of classroom teachers endorsed these statements at a moderate level. These results can be reviewed in Figure 75.

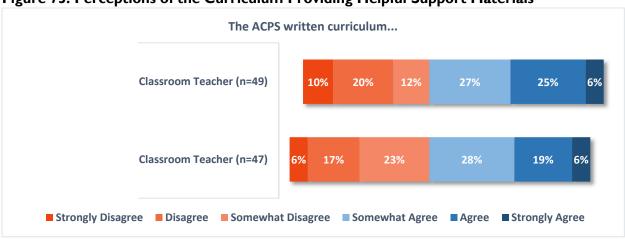


Figure 75. Perceptions of the Curriculum Providing Helpful Support Materials

Note. Content specialist/instructional coach results are not reported due to a sample size of less than 5.

Respondents were asked about the accessibility of the ACPS written curriculum on Blackboard. This item was endorsed at the highest rate of 100% by ELL teachers and administrators. Those who selected the job title of "Other" had the lowest endorsement at 43%. The positions of those who selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position. These results can be reviewed in Figure 76.

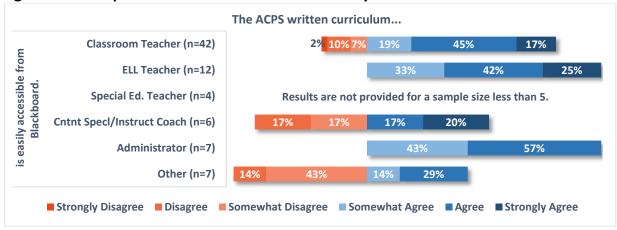
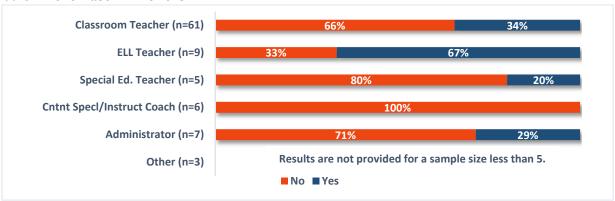


Figure 76. Perceptions of the Curriculum Accessibility

Fewer staff at the middle level reported they attended curriculum-focused professional development with ELL teacher participation (67%) and special education teacher participation (75%) at the highest levels. The lowest rate of attendance was seen in content specialists and instructional coaches, reporting that they did not attend. The positions of those selecting "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 77.





The most common reason for not attending the professional development was "I did not know it was offered." The positions of those who selected "Other" included: reading specialist and technology integration specialist; please note that all respondents did not describe their "other" position. "Other" reasons for not attending professional development included: new hire and not offered during school day. These results can be reviewed in Figure 78.

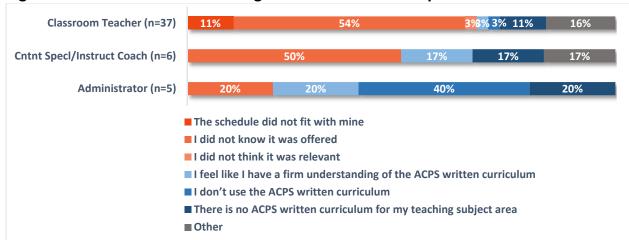


Figure 78. Reasons for Not Attending the Professional Development

Note. ELL teacher, Special Ed. teacher, and Other results are not reported due to a sample size of less than 5.

Middle school staff responded to questions regarding the perceived quality of the professional development in enhancing their knowledge and skills. Results were not reported for special education teachers, content specialists, instructional coaches, administrators, and those selecting "other" due to a sample size of less than five respondents. The question with the highest endorsement from staff was "The PD related to the ACPS written curriculum increased my understanding of how to implement the curriculum in my subject area(s)" from 53% (classroom teachers) to 84% (ELL teachers). For the item, "The PD related to the ACPS written curriculum improved my knowledge of instructional strategies," ELL teachers had the highest level of endorsement at 67% while classroom teachers had the lowest level of endorsement at 65%. For the item, "The PD related to the ACPS written curriculum improved my teaching skills," ELL teachers again had the highest level of endorsement at 67% with classroom teachers again having the lowest level of endorsement at 58%. The question with the lowest endorsement was "The PD related to the ACPS written curriculum increased my understanding of how to formatively assess my students as it relates to the curriculum" with 35% (ELL teachers) to 53% (classroom teachers) endorsement across staff. The positions of those that selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position within ACPS. These findings can be reviewed in Figure 79.

The PD related to the ACPS written curriculum... Classroom Teacher (n=20) 10% 10% 15% ELL Teacher (n=6) 33% 17% Classroom Teacher (n=21) 10% 14% 19% 24% ELL Teacher (n=6) 33% 17% Classroom Teacher (n=21) 19% 19% 10% ELL Teacher (n=6) 17% 17% 17% Classroom Teacher (n=21) 14% 14% ELL Teacher (n=6) 33% 17% 1<mark>% 17%</mark> ■ Strongly Disagree ■ Disagree ■ Somewhat Disagree ■ Somewhat Agree ■ Agree ■ Strongly Agree

Figure 79. Perceptions of Increased Knowledge and Skills from Attending ACPS **Professional Development**

Note. Content specialist/instructional coach, Special Ed. teacher, Administrator, and Other results are not reported due to a sample size of less than 5.

Middle school staff responded to questions regarding the ACPS professional development. Results were not reported for special education teachers, content specialists, instructional coaches, administrators, and those selecting "other" due to a sample size of less than five respondents. For the item, "The PD related to the ACPS written curriculum was a good use of my time," ELL teachers had the highest level of endorsement at 66% while classroom teachers had the lowest level of endorsement at 58%. For the item, "The PD related to the ACPS written curriculum included follow up opportunities for ongoing assistance," ELL teachers again had the highest level of endorsement at 66% with classroom teachers having the lowest level of endorsement at 48%. The positions of those that selected "Other" included: reading specialist and technology integration specialist; please note that not all respondents provided their "other" position. These findings can be reviewed in Figure 80.

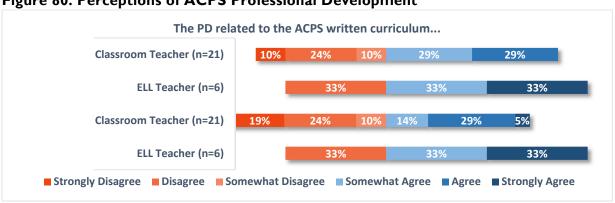


Figure 80. Perceptions of ACPS Professional Development

Note. Content specialist/instructional coach, Special Ed. teacher, Administrator, and Other results are not reported due to a sample size of less than 5.

High School

ACPS high school staff were asked for their perceptions on whether the ACPS written curriculum provides helpful support materials for instruction and lesson planning and whether support materials are aligned to the curriculum. Classroom teachers endorsed the curriculum at a high level (over 67% for both items) for providing helpful support materials for their instruction and lesson planning and that support materials such as textbooks are aligned to the curriculum. These results can be reviewed in Figure 81.

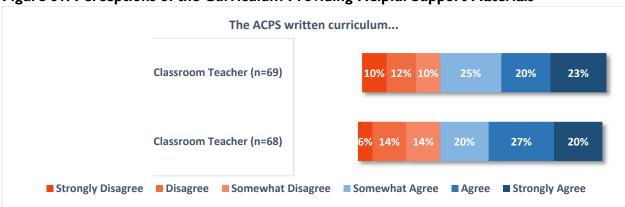


Figure 81. Perceptions of the Curriculum Providing Helpful Support Materials

Note. Content specialist/instructional coach results are not reported due to a sample size of less than 5.

Respondents were asked about the accessibility of the ACPS written curriculum on Blackboard. This item was endorsed at the highest rate of 88% by administrators and 81% by content specialists and instructional coachers. Those who selected the job title of "Other" had the lowest endorsement at 69%. The positions of those who selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These results can be reviewed in Figure 82.

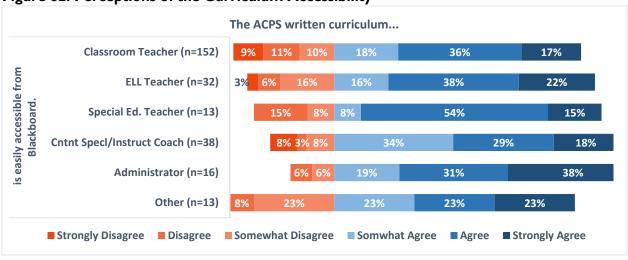


Figure 82. Perceptions of the Curriculum Accessibility

With regard to the professional development, most respondents reported not attending. The highest rate of attendance was seen in administrators (55%), while staff who selected "other" had the lowest rate (22%). The positions of those who selected "Other" included: career and technical education

teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These findings can be reviewed in Figure 83.

Classroom Teacher (n=99)

ELL Teacher (n=17)

Special Ed. Teacher (n=12)

Cntnt SpecI/Instruct Coach (n=3)

Administrator (n=11)

Other (n=9)

62%

38%

24%

50%

Results are not provided for a sample size less than 5.

Figure 83. Attendance at ACPS Written Curriculum-Focused Professional Development Within the Last 12 Months

The most common reason for not attending the professional development was "I did not know it was offered." The positions of those that selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that all respondents did not provide their "other" position. "Other" reasons for not attending professional development included: new hire, busy with other commitments, not offered during school day, not invited to the professional development, and no professional development offered for my content area. These results can be viewed in Figure 84.

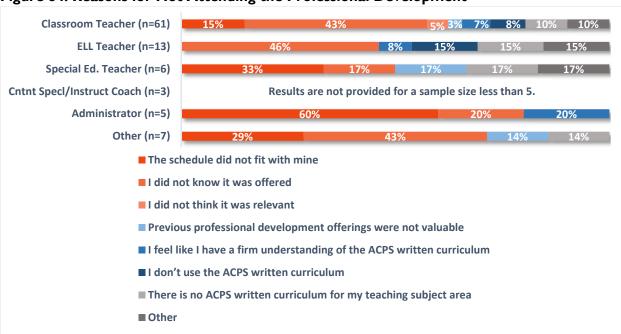
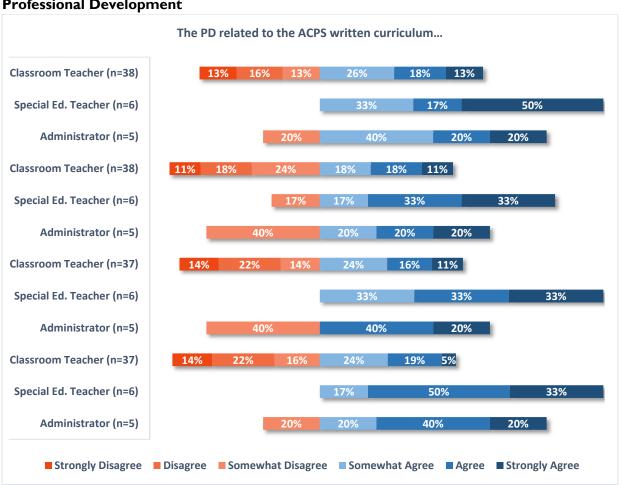


Figure 84. Reasons for Not Attending the Professional Development

High school staff responded to questions regarding the perceived quality of the professional development. Results were not reported for ELL teachers content specialists, instructional coaches, and

those selecting "other" across all questions due to a sample size of less than five respondents. For the item, "The PD related to the ACPS written curriculum improved my knowledge of instructional strategies," special education teachers had the highest level of endorsement at 100% while classroom teachers had the lowest level of endorsement at 57%. For the item, "The PD related to the ACPS written curriculum increased my understanding of how to implement the curriculum in my subject area(s)," special education teachers had the highest level of endorsement at 100% with classroom teachers again having the lowest level of endorsement at 51%. For the item, "The PD related to the ACPS written curriculum increased my understanding of how to formatively assess my students as it relates to the curriculum," special education teachers again had the highest level of endorsement at 100% with classroom teachers again having the lowest level of endorsement at 48%. The question with the lowest endorsement was "The PD related to the ACPS written curriculum improved my teaching skills" with 47% (classroom teachers) to 83% (special education teachers) endorsement across staff. The positions of those selecting "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position within ACPS. These findings can be reviewed in Figure 85.

Figure 85. Perceptions of Increased Knowledge and Skills from Attending ACPS Professional Development



Note. Content specialist/instructional coach, ELL teacher, and Other results are not reported due to a sample size of less than 5.

Lastly, high school staff responded to questions regarding ACPS professional development. Results were not reported for ELL teachers, content specialists, instructional coaches, and those selecting "other" across all questions due to a sample size of less than five respondents. The question with the highest endorsement from staff was "The PD related to the ACPS written curriculum was a good use of my time" from 65% (classroom teachers) to 100% (special education teachers). For the item, "The PD related to the ACPS written curriculum included follow up opportunities for ongoing assistance," special education teachers again had the highest level of endorsement at 100% and classroom teachers had the lowest level of endorsement (41%). The positions of those that selected "Other" included: career and technical education teacher, classroom teachers who are also ELL teachers, music teacher, testing coordinator, school improvement coach, school librarian, and world languages teacher; please note that not all respondents provided their "other" position. These findings can be reviewed in Figure 86.

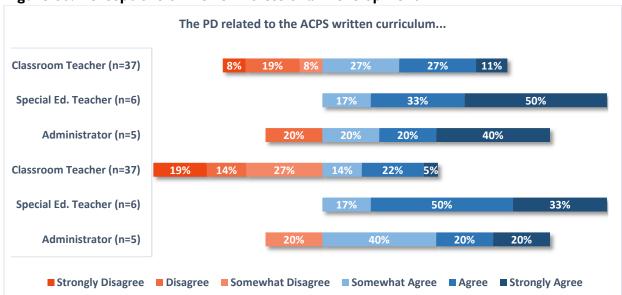


Figure 86. Perceptions of ACPS Professional Development

Note. Content specialist/instructional coach, ELL teacher, and Other results are not reported due to a sample size of less than 5.

Discussion

The purpose of Task 6 was to assess the extent to which the supported curriculum (professional development, time, and materials) meets the needs of division and school staff to improve student learning. While ACPS regularly offers professional development to staff, the height of attendance at professional development sessions about the written curriculum occurred during the 2011-2012 school year with over 400 attendees at various professional development sessions. Since that school year, professional development has been offered to teachers new to ACPS or to teachers at a specific education level, in a particular content area (i.e., science and social studies), or working with a special student population (i.e., ELLs and SWD) with lower attendance levels. This may be in part due to scheduling conflicts, lack of awareness of professional development sessions offered, or sessions perceived as not helpful in enhancing requisite knowledge and skills (as indicated by teacher focus group and survey findings). In focus groups, administrators reported professional development offerings for teachers related to the written curriculum is inconsistent and frequently cancelled due to unforeseen circumstances. Despite this, elementary staff attended professional development offered by ACPS on the written curriculum at a moderate level (53% average across ACPS positions) with middle and high school staff attending at lower rates (30% and 38% average across ACPS positions, respectively).

However, recent support from ACPS curriculum specialists has been beneficial to teachers in implementing the written curriculum, according to what teachers and administrators reported in the focus groups.

Based on survey findings, administrators had a high level of endorsement of ACPS professional development enhancing their knowledge and skills related to the written curriculum. However, the survey data were not reinforced during administrator focus groups. Administrators reported professional development sessions specifically focused on the needs of their school would be most helpful in implementing the written curriculum.

ACPS staff provided their perceptions of support materials for and accessibility of the written curriculum. In terms of support materials related to the ACPS written curriculum, such as online resources and lesson ideas, ACPS classroom teachers, content specialists, and instructional coaches perceived them as moderately helpful in planning and delivering instruction based on survey findings. All ACPS staff indicated the written curriculum is easily accessible from Blackboard; however, teachers noted that the curriculum was cumbersome to use and indicated it was easier to use online search engines to locate lesson ideas than to scan through the hyperlinks in the written curriculum.

REFERENCES

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- Epstein, J. L. (2011). School, family, and community partnerships: Preparing educators and improving schools. Boulder, CO: Westview Press.
- Marzano, R. J. (2003.) What works in schools: Translating research into action. Alexandria, VA. ASCD.
- SERVE Center. (n.d.). Communicating with families: Strategies for children with special needs. Greensboro, NC: SERVE Center at the University of North Carolina at Greensboro.
- Wiggins, G., & McTighe, J. (2005). Understanding by design (2nd ed.). Alexandria, VA. ASCD.

APPENDIX A: DOCUMENTS REVIEWED AND REFERENCED

Specific ACPS Curriculum Guides and Transfer Tasks Reviewed by McREL Analysts
English Language Arts, Grade 3
English Language Arts, Grade 5
English Language Arts, Grade 8
English Language Arts, Grade 11
Science, Grade 3
Science, Grade 5
Science, Grade 8
Science, Biology I
Mathematics, Grade 3
Mathematics, Grade 5
Mathematics, Algebra I
Mathematics, Geometry
Social Studies, Grade 3
Virginia Studies, Grade 4
Civics and Economics, Grade 8
World History I

Additional ACPS Documents Reviewed by McREL Analysts
ACPS Language Acquisition Framework
ELL Strategies
Strategies for Promoting Culturally Responsive Classrooms in ACPS
Differentiation Framework
Executive Function Research & Strategies
Honors Design Principles

Reference Documents Used by McREL Analysts
Virginia Standards of Learning
World-Class Instructional Design and Assessment (WIDA) English Language Development Standards

APPENDIX B:TASKS 1,2, AND 4 TOOLS AND RUBRICS

Interview Protocol – Curriculum Developers

Good afternoon. My name is______. Thank you so much for taking the time to talk with me today. The purpose of the interview is to gather information on the development of the ACPS written curriculum. Your input and perspective are critical to the gathering this information.

Before we get started, there are a few logistics that need to be completed. First, I emailed you a consent form prior to this call. Please read it while I provide an overview of it. [Talk through main points of the consent form.] Are there any questions about the consent form? [If there are, answer them as best you can.] Second, I will be audio recording the interview to ensure that I capture your responses accurately when I analyze the data. The information gathered from the interview will be kept strictly confidential. Your name will not be used in any reports. Instead, comments will be summarized into themes. Audio files from the interview will be kept in a password-protected location on a secure server and destroyed after the end of the project. Are there any questions about recording the interview? [If there are, answer them.] Are you willing to be recorded? If yes, respond: Thank you. [If no, determine what could be done to allow the recording to take place or proceed with note taking only. Once this is taken care of, proceed with conducting the interview.]

Since this is a phone interview, I'll need you to provide your consent orally when I turn on the audio recording. [Turn on audio recording.] Ok. Do you agree to participate in this phone interview as I've described it to you?

Thank you. Let's get started.

Background Questions

First, I would like to talk with you about your role within ACPS and involvement in the development of the written curriculum.

- 1. What is your current role within the division?
- 2. How long have you been involved with the process of creating the written curriculum?
 - a. [Follow up] Which version(s) have you been involved in creating?
- 3. Prior to your current role within the division, what was your role?
 - a. [Follow up] Were you within ACPS? If not, what division were you in?

General Curriculum Development

Now, I would like to talk with you about the curriculum development process.

- 1. Please describe how the written curriculum was developed. What process did you use?
- 2. How were teachers involved in the curriculum development process?
 - a. [Follow up] Please describe the process to garner the teacher perspective in the development of the written curriculum.
 - b. [Follow up] How many teachers were involved and from what level (i.e., elementary, secondary)?

- c. [Follow up] How often did the teachers meet with the developers of the written curriculum?
- d. [Follow up] How did the teachers provide input into the written curriculum?
- 3. Were other stakeholders (i.e. parents, students, community members) involved in the in curriculum development process?
 - a. [Follow up] If yes, please describe the process to garner the perspective of other stakeholders in the development of the written curriculum.
 - b. [Follow up] How many stakeholders were involved and from what stakeholder group?
 - c. [Follow up] How often did the stakeholders meet with the developers of the written curriculum?
 - d. [Follow up] How did the stakeholders provide input into the written curriculum?
 - e. [Follow up] If other stakeholders were not involved, why not?
- 4. How were the Virginia Standards of Learning incorporated into the curriculum?
 - a. [Follow up] What is the level of alignment between the ACPS curriculum and the SOLs?
 - b. [Follow up] How is alignment with the SOLs articulated within the written curriculum?
- 5. What were the greatest challenges faced in the development of the written curriculum?
- 6. What were the greatest successes in the development of the written curriculum?

Curriculum Structure

Now I would like to ask you about the structure of the curriculum.

- 1. How was the structure of the written curriculum decided?
 - a. [Follow up] How was the use of three stages (i.e., desired results, assessment evidence, and unit learning plan) decided?
 - b. [Follow up] How was the content of the three stages decided?
 - c. [Follow up] How was it decided that there are no required lessons in the written curriculum?
- 2. To what extent do you think that the structure of the written curriculum is user friendly?
 - a. Follow up prompts:
 - i. What type of feedback have you received from users?
 - I. [Follow up, prompt] Teachers? Principals?
- 3. As you reflect on structure of the curriculum, what changes might you suggest for the next revision?

Curriculum Content

The next set of questions I would like to ask you about involves the content of the ACPS curriculum.

- 1. What resources did you use to develop the written curriculum?
 - a. [Follow up] Books?
 - b. [Follow up] previously developed ACPS or non-ACPS written curriculum?
 - c. [Follow up] ACPS expertise?

- d. [Follow up] external expertise?
- 2. How does the written curriculum help teachers plan instruction for special student populations?
 - a. Follow up prompts:
 - i. TAG (talented and gifted) students?
 - ii. ELL students?
 - iii. Students with disabilities?
 - iv. Economically disadvantaged students?
- 3. How were 21st Century Skills incorporated in the curriculum? In the transfer tasks?
- 4. How do the transfer tasks help teachers assess student learning? How do the transfer tasks address the needs of special student populations?
 - a. Follow up prompts:
 - i. TAG (talented and gifted) students?
 - ii. ELL students?
 - iii. Students with disabilities?
 - iv. Economically disadvantaged students?
- 5. How would you describe the level of intended rigor in the curriculum?
 - a. [Follow up] How do you know the content is rigorous?
- 6. How does the curriculum help teachers increase student engagement during instruction?
 - a. [Follow up] How do you know the content is engaging?

Intended Use of the Curriculum

The next few questions are about the intended use of the curriculum.

- 1. Describe how the written curriculum is intended to be used by division and school staff.
 - a. [Follow up] By division-level staff?
 - b. [Follow up] By principals?
 - c. [Follow up] By teachers?
 - d. [Follow up] by teacher teams?
- 2. How was the written curriculum implemented (rolled out) by the division? Was it a K-12 implementation? K-5? 6-12? Staggered?
 - a. [Follow up] How was the roll-out decision made?
- 3. From your perspective, what is the level of implementation of the written curriculum across the division (i.e., not implemented at all, planning for implementation, partially implemented, or fully implemented)?
 - a. [Follow up] Which schools have had the highest level of implementation? What level are the schools (i.e., elementary, secondary)?
 - b. [Follow up] Which schools have had the lowest level of implementation? What level are the schools (i.e., elementary, secondary)?
 - c. [Follow up] What evidence supports your perspective of the high and low level implementing schools?

- 4. What guidance was provided to division and school staff on how to implement the written curriculum?
 - d. [Follow up] Is there policy outlining how division curriculum should be implemented?
- 5. What support was provided to principals and teachers to implement the written curriculum?
 - a. [Follow up] Was professional development provided? If yes, please describe what was provided. If no, why was professional development not provided?
 - b. [Follow up] What materials were provided to principals and teachers? If no materials were provided, why not?
 - c. [Follow up] Was ample time for professional development provided to implement the curriculum? If yes, please describe. If no, what time was needed?
 - d. [Follow up] What other support was provided to principals and teachers?
- 6. How was the written curriculum presented to parents of ACPS students?
 - e. [Follow up] What information was communicated to parents about the written curriculum?
 - f. [Follow up] What methods were used to communicate this information with parents?
 - g. [Follow up] What feedback, if any, was received from parents about the written curriculum? If feedback was received, how was it incorporated into the written curriculum?

Follow-up Support

This set of questions are about the follow-up support provided to teachers as they use the curriculum.

- I. What follow-up support does the division provide to principals and teachers to implement the written curriculum?
 - a. [Follow up] What professional development is provided? Please describe what is provided. If professional development is not being provided, why not?
 - b. [Follow up] What additional materials are provided to principals and teachers? Please describe what are provided. If additional materials are not being provided, why not?
 - c. [Follow up] Will additional time be provided to teachers to plan for the continued implementation of the written curriculum? If yes, please describe what will be provided. If additional time will not be provided, why not?
 - d. [Follow up] What other support do you intend to provide to principals and teachers?

Closing Questions

These last few questions are about your general perspective of the ACPS written curriculum.

- 1. Overall, what do you think is the greatest strength of the written curriculum?
- 2. Overall, what do you think is the biggest challenge facing the written curriculum?
- 3. What one change do you think would have the greatest positive impact to the written curriculum moving forward?
- 4. What additional comments or feedback do you have about the written curriculum?

Thank you so much for participating in this interview. If there is anything you would like to discuss or additional information you would like to provide, please don't hesitate to contact me. [Provide contact information to interviewee.]

TASK I

CET 1. Content in the curriculum addresses the same knowledge and skills as the Virginia Standards of Learning for the given grade or course.								
0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent				
The curriculum does not address any of the content of the SOL.	The curriculum addresses less than half of the content of the SOL, or the emphasis and meaning of the content in the curriculum differs importantly from the standards. Less than 65% of the standards are rated adequate or excellent.	The curriculum provides only an implied or superficial coverage of the SOL, or addresses a majority, but not all content of the standards. Between 65% and 85% of the standards are rated adequate or excellent.	The curriculum adequately addresses all important aspects of the SOL. More than 85% of all standards are rated adequate or excellent.	The curriculum thoroughly addresses all important aspects of the SOL in a variety of ways and may address subtle aspects of the content.				

CET.2 The curriculum requires comparable cognitive demand as the Virginia Standards of Learning for the same content area knowledge and skills.							
0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent			
No SOLs are applied at the same or higher cognitive level in the curriculum.	Very few (<50%) SOLs are applied at the same or higher cognitive level in the curriculum.	Some (between 50-70%) SOLs are applied at the same or higher cognitive level in the curriculum.	Most (>70%) SOLs are applied at the same or higher cognitive level in the curriculum.	Nearly all (>95%) SOLs are applied at the same or higher cognitive level in the curriculum.			

CET 3. Content in the curriculum addresses the knowledge and skills identified in the Framework for 21st Century Skills developed by the P21 Partnership for 21st Century Learning.							
0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent			
Units do not address any 21st century skills.	Units address less than 2 of the overarching categories of 21st Century Skills.	Units address at least one 21st Century Skill within 2 or 3 of the 4 overarching categories.	Units address at least one 21st Century Skill within each of the 4 overarching categories.	Units address multiple 21st Century Skills within each of the 4 overarching categories.			

CET.4 Content in the curriculum integrates the mathematical proce	edures (i.e., habits of mind) identified by
the Virginia Standards of Learning (SOL) Goals.	

0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent		
The curriculum does not address	The curriculum rarely presents a	The curriculum sometimes presents	The curriculum usually presents a	The curriculum consistently		
SOL Goals/Inquiry	balance of		•	•	balance of	presents a balance
Skills	mathematical procedures and	mathematical procedures and	mathematical procedures and	of mathematical procedures and		
	deeper conceptual understanding.	deeper conceptual understanding.	deeper conceptual understanding.	deeper conceptual understanding.		
			8.			

TASK 2

	T		
$\Delta = I$	The embedded transfer tasks en	nnasize the same knowleds	to and skills as the clirricillim
	The chibeduca diansier tasks chi	ipilasize the same knowleds	ge and skins as the curriculant.

0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent
None of the knowledge and skills required by the transfer tasks are emphasized in the corresponding	Less than half of the knowledge and skills required by the transfer tasks are emphasized in the corresponding	Most of the knowledge and skills required by the transfer tasks are emphasized in the corresponding	Nearly all (> 90%) of the knowledge and skills required by the transfer tasks are emphasized in the	All of the knowledge and skills required by the transfer tasks are emphasized in the corresponding
unit.	unit.	unit.	corresponding unit.	unit.

AET.2 The curriculum requires comparable cognitive demand as the embedded transfer for the same content area knowledge and skills.

rangan da karangan da kara								
0= Not found	I= Weak	2= Marginal	3= Adequate	4= Excellent				
The curriculum includes no practice or scaffolding for students to reach the level of the Transfer Tasks.	The curriculum includes very little practice or scaffolding for students to reach the level of the Transfer Tasks.	The curriculum includes some practice or scaffolding for students to reach the level of the Transfer Task.	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks.	The curriculum includes sufficient practice or scaffolding for students to reach the level of the Transfer Tasks, with evidence that students build systematically towards that level and have opportunity for				
				extension.				

TASK 4

		Rating									
Indicator	Criteria	ELA	Math	Science	Social Studies	Content Overall	ELL	SWD	TAG	Special Populations Overall	Comments Evidence
English Language Development Standards	Evidence that language development standards are incorporated into the curricula										
Instructional Resources and Materials for Special Populations	A variety of resources are provided to optimize challenge and enable access to grade level objectives										
Instructional Strategies for Special Populations	A variety of instructional strategies are provided to differentiate for students with varying learning needs										
Assessment Accommodations	Accommodation suggestions are provided to enable students with varying learning needs to demonstrate their understanding of learning objectives										
Metacognition	Suggestions are included to facilitate student self-regulation and ownership of their learning										

APPENDIX C:TASKS 3-6 DATA COLLECTION TOOLS

Classroom Observation Protocol

Task 3, Task 4, and Task 5

determine task level

School	Teacher						
Class Start Time	Class End Time						
Observation Start Time _	Observation End T	Time					
Grade Level(s)	Class size						
Number of additional aides present (type of known)							
Instructional Grouping		ent in Minutes					
Direct instruction by the teacher (whole group) Direct instruction by the	☐ 0-5 mins ☐ 6-10 mins ☐ 11-15 mins ☐ 0-5 mins ☐ 6-10 mins	☐ 16-20 mins ☐ 21-25 mins ☐ 26-30 mins ☐ 16-20 mins ☐ 21-25 mins					
Student independent work (solving problems, related to class text/readings, etc.)	☐ 11-15 mins ☐ 0-5 mins	☐ 26-30 mins ☐ 16-20 mins ☐ 21-25 mins ☐ 26-30 mins					
Student small group work (includes center work)	☐ 0-5 mins ☐ 6-10 mins ☐ 11-15 mins	☐ 16-20 mins ☐ 21-25 mins ☐ 26-30 mins					
Other	 □ 0-5 mins □ 6-10 mins □ 11-15 mins 	☐ 16-20 mins ☐ 21-25 mins ☐ 26-30 mins					
Complexity of Student Task(s)	Desc	cription					
☐ Level I	a one-step equation.	abilities. Build algorithmic skill (+, -, *, /). Solve					
☐ Level 2	Beyond recall, requires comprehension and some processing of text. Use context clues, identify/summarize main events, determine operation to use (+, -, *, /), solve simple word problems.						
☐ Level 3	Deep knowledge is required. Students explain, generalize and/or connect ideas (explain author's purpose, analyze/describe characteristics). Math tasks are complex involving multiple steps and maybe abstract.						
☐ Level 4	Higher-order thinking is required. Perform complex analyses across texts, examine/explain alternative perspectives, describe/illustrate common themes. Math tasks require significant reasoning, planning, developing, and thinking typically over an extended time. Requires students to make connections across mathematics strands (number, algebra, geometry, probability).						
☐ Unable to	Add note about why unable to determine level:						

The teacher addresses at least one of the learning goals/objectives submitted prior to class (identify objective in notes)	□ This was observed □ This was not observed
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Classroom l	Instructional Features	Description		
The teacher probes his/her students' thinking and prompts them to explain their answers in greater depth.	□ This was observed □ This was not observed	 Teacher questions students to understand the topic, meaning, or structure of the text. Teacher questions students to support their conclusions/ideas about text, problem solving, and/or inquiry activity. 		
The teacher connects content/topics to why they may matter to students.	□ This was observed □ This was not observed	 Teacher relates subject content to real world application. Teacher prompts students to consider why subject content might matter to them. 		
The teacher uses formative assessment data to provide feedback to students.	□ This was observed □ This was not observed	 Teacher provides descriptive or detailed feedback to students in one-on-one and/or small group settings. Teachers provide students with time to revise their work based on teacher feedback. 		
There is evidence the teacher has planned for a variety of student learning needs.	□ This was observed □ This was not observed	 Teacher utilizes a variety of presentation materials and/or techniques (e.g., variety of texts/Lexile levels, manipulatives, visual and auditory directions, modeling expectations) Teacher provides a variety of tools or strategies for students (e.g., rubrics, graphic organizers, etc.) Teacher uses technology to enhance student learning experiences 		
The teacher adjusts instruction for students as needed during the lesson.	□ This was observed □ This was not observed	Teacher breaks tasks down into smaller/simpler components; adjusts assignments to promote success; provides specialized instruction; and/or provides extra instruction, practice, or review for targeted groups of students having difficulty with task at hand		
The teacher uses strategies to promote student metacognition.	□ This was observed □ This was not observed	 Teacher encourages students to think ahead and plan Teacher prompts discussion of learning goals Teacher provides students with methods to monitor progress Teacher encourages students to self-reflect 		
Students spend time reading, talking about, or writing about text, questions, problems, etc.	□ This was observed □ This was not observed	 Students discuss the reading, writing, or problem material. Students reflect on given tasks through reports, essays, solutions strategies, or other written materials. Students practice reading, writing, or problem solving skills during class. 		

Students justify and/or support their answers using evidence from class text(s), information learned, or previous experiences.	□ This was observed □ This was not observed	 Students support their conclusions related to the text or problem. Students use think aloud strategies to support their conclusions. The teacher presents examples of student work that use evidence to support their conclusions about the text or problem.
Students use a guided peer-feedback process to give and get feedback on the quality of their work	□ This was observed □ This was not observed	 Students use a peer-feedback protocol to provide their classmates with feedback on the quality of their work. Students share their class work with one another. Students have time to revise work based on feedback. Students are able to seek help from their peers in understanding unknown or unclear words/concepts/problem-solving strategies.
Students monitor their own learning.	□ This was observed □ This was not observed	 Students engage in planning Students discuss learning goals Students use methods to monitor progress Students self-reflect

Pick 3 students who represent those in the classroom (one male, one female, etc.), and assess each student as being on-track or off-track with instruction, every 5 minutes. Note: If class start time is 9:00AM, then start on-track assessment at 9:05AM.

	Interval I	Interval 2	Interval 3	Interval 4	Interval 5
Student I					
Student 2					
Student 3					

Focus Groups

Task 3, Task 4, Task 5, and Task 6

Teacher Protocol

Alexandria City Public Schools (ACPS) Teacher Focus Group Protocol Grade(s): ____ # of participants: ____ School: ____ Date: Time: Researcher:

Good afternoon. My name is <insert name>. Thank you so much for taking the time to talk with me today. The purpose of this focus group is to gather information on your perspectives related to the ACPS curriculum and related professional development provided by the division. ACPS is interested in understanding how the written curriculum supports your efforts to teach the Virginia Standards of Learning, increase rigor and student engagement, and the extent to which the curriculum helps you meet the needs of special student populations. Your input and perspective are critical to gathering this information.

Before we get started, there are a few logistics that need to be completed. First, I emailed you a consent form prior to this focus group. [Talk through main points of the consent form.] Are there any questions about the consent form? [If there are, answer them as best you can.] Second, I will be audio recording the focus group to ensure that I capture your responses accurately when we analyze the data. The information gathered from the focus group will be kept strictly confidential. Your name will not be used in any reports. Instead, comments will be summarized into themes. Audio files from the focus group will be kept in a password-protected location on a secure server and destroyed after the end of the project. Are there any questions about recording the interview? [If there are, answer them; If no, then announce "I will now start the recording"]

Thank you. Let's get started.

How the written curriculum meets the needs of teachers

The first set of questions are about whether the ACPS written curriculum meets your needs as teachers.

- I. How often do you use the written curriculum to guide your lesson development and instruction?
 - a. Do you supplement the curriculum with other resources?
 - i. Why do you supplement?
 - ii. What resources do you use?
 - b. Are the ACPS curriculum materials for your content/course complete? That is, do you have access to a complete curriculum guide?
- 2. How does the written curriculum...
 - a. Help you teach (and your students achieve) the Virginia Standards of Learning (VA SOLs) for your grade/course?
 - i. Do you feel that the written curriculum and VA SOLs are aligned?
 - b. Help you assess student progress (achievement) toward meeting the VA SOLs?
 - i. Are the division-developed assessments aligned with VA SOLs?
 - ii. Do you administer the unit transfer tasks?
 - I. How do data from the transfer tasks help you determine student progress toward the VA SOLs?
 - 2. Are data from the transfer tasks useful for planning instruction?
 - c. Help you address the needs of special student populations? (Possible follow-up: Are the sample lessons, resource links, assessment guidance, etc. useful? Explain.)
 - i. ELL
 - ii. TAG
 - iii. SWD

- d. Help you increase rigor in the classroom? Please explain or provide examples.
- e. Help you facilitate student engagement/interest in the content? Please explain or provide examples.
- f. What component of the written ACPS curriculum helps you most in your teaching?
- g. What could be improved about the written ACPS curriculum?
- 3. How easy or difficult is it to implement the written ACPS curriculum?
 - a. What were the greatest challenges faced in the implementation of the written curriculum?
 - b. What were the greatest successes in the implementation of the written curriculum?

Division-provided professional development

- I. Have you attended division-provided professional development that focused on how to implement the written ACPS curriculum?
 - a. If no, what prevented you from attending?
 - b. If yes, how did this professional development help you implement the written curriculum?
 - c. If yes, what might make this professional development even better?
- 2. What other assistance/support do you need to help you implement the written curriculum?

Closing Questions

These last few questions are about your general perspective of the ACPS written curriculum.

- 1. Overall, what do you think is the greatest strength of the written curriculum?
- 2. What one change do you think would have the greatest positive impact to the written curriculum moving forward?
- 3. What additional comments or feedback do you have about the written curriculum?

Thank you so much for participating in this focus group. We will not stop the recording if there are no further comments

Administrator Protocol

Alexandria City Public Schools (ACPS) Administrator Focus Group Protocol Grade(s): ____ # of participants: ____ School: ____ Date: ____ Time: ____ Researcher: ____

Good afternoon. My name is <insert name>. Thank you so much for taking the time to talk with me today. The purpose of this focus group is to gather information on your perspectives related to the ACPS curriculum and related professional development provided by the division. ACPS is interested in understanding how the written curriculum supports schools' efforts to teach the Virginia Standards of Learning, increase rigor and student engagement, and the extent to which the curriculum helps your teachers meet the needs of special student populations. Your input and perspective are critical to the gathering this information.

Before we get started, there are a few logistics that need to be completed. First, I emailed you a consent form prior to this focus group. [Talk through main points of the consent form.] Are there any questions about the consent form? [If there are, answer them as best you can.] Second, I will be audio recording the focus group to ensure that I capture your responses accurately when we analyze the data. The information gathered from the focus group will be kept strictly confidential. Your name will not be used in any reports. Instead, comments will be summarized into themes. Audio files from the focus group will be kept in a password-protected location on a secure server and destroyed after the end of the project. Are there any questions about recording the interview? If there are, answer them; If no, then announce "I will now start the recording"]

Thank you. Let's get started.

Curriculum meets the needs of school staff

The first few questions are about whether the ACPS written curriculum meets your teachers' needs. Our questions pertain specifically to the subject areas of English language arts, mathematics, science, and social science.

- I. From your perspective, do teachers have access to complete curriculum guides for the subjects/courses that they teach? Please explain.
- 2. From your perspective, to what extent do teachers supplement the written curriculum? (That is, do teachers typically use the written curriculum to plan and deliver instruction or do they primarily use other resources?)
 - a. Which subject areas do teachers supplement the most? What level are the schools (i.e., elementary, secondary)?
 - b. Which subject areas do teachers supplement the least? What level are the schools (i.e., elementary, secondary)?
 - c. What evidence supports your perspective of the high and low levels of supplementing the written curriculum?
- 3. From your perspective, what is the level of implementation of the written curriculum in your schools (i.e., not implemented at all, planning for implementation, partially implemented, or fully implemented)?
 - a. Which subject areas do teachers have the highest level of implementation? What level are the schools (i.e., elementary, secondary)?
 - b. Which subject areas do teachers have the lowest level of implementation? What level are the schools (i.e., elementary, secondary)?
 - c. What evidence supports your perspective of the high and low levels implementing teachers?
- 4. Is there a staff member at your school (lead teacher, department chair, instructional coach, administrator) who is responsible for helping teachers implement the written curriculum? If so, is this an effective strategy? Please explain.

- 5. From your perspective, do the ACPS-developed assessments facilitate teachers' ability to identify student learning needs?
 - a. Which subject areas do teachers have the highest level of success with the ACPS-developed assessments? What level are the schools (i.e., elementary, secondary)?
 - b. Which subject areas do teachers have the lowest level of success with the ACPS-developed assessments? What level are the schools (i.e., elementary, secondary)?
 - c. What evidence supports your perspective of the high and low levels of success?

Division-provided professional development

- I. What professional development was provided for school administrators to help administrators understand the expectations for implementing the written curriculum?
 - a. What materials were provided to principals?
 - b. Was ample time for professional development provided?
- 2. Have the teachers at your school attended division-provided professional development focused on how to implement the written curriculum?
- **3.** Have you attended division-provided professional development for teachers that focused on how to implement the written ACPS curriculum?
 - a. If no, what prevented you from attending?
 - b. If yes, what is your perception of the quality and/or effectiveness of this teacher-focused professional development?
 - c. If yes, what might make this professional development even better?
- **4.** As the school's instructional leader, what other assistance/support do you need to help your teachers implement the ACPS written curriculum?

Closing Questions

These last few questions are about your general perspective of the ACPS written curriculum.

- 1. Overall, what do you think is the greatest strength of the written curriculum?
- 2. Overall, what do you think is the biggest challenge to implementing the written curriculum?
- 3. What one change do you think would have the greatest positive impact to the written curriculum moving forward?
- 4. What additional comments or feedback do you have about the written curriculum?

Thank you so much for participating in this focus group. We will not stop the recording if there are no further comments.

Student Protocol

Alexandria City Public Schools (ACPS) Student Focus Group Protocol

Grade(s):	# of participants:	School:
Date:	Time:	Researcher:

Facilitator Directions

- I. Hand out the Student Focus Group forms to each student once all students have entered the room, and read the "student directions" (below).
- 2. Ask the students to make their rating on the form and write a brief reason why they answered the way they did.
- 3. Now discuss why the students gave the ratings that they did using the probes provided.
- 4. After discussing each question, collect all of the student forms before they leave.

Student Directions

Hi! My name is <insert name> and I am from McREL in <insert location>. I am here to learn about your experiences at your school. I'm going to give you a piece of paper with questions about your teachers and your classes. Please tell us how often you think your teachers or school do the things in the questions on a scale from "most of the time" to "never". There are no right or wrong answers. The important thing is that you answer the questions honestly. What you say in this room stays in this room—I will not tell your teachers or anyone in your school your ratings or what you have said during our discussion. Please also be respectful of other students and do not share what they say with others. You may share your own thoughts and opinions from this discussion with anyone you wish. The responses of everyone in the group will be reported together — no individual students will be identified. Do you have any questions for me before we begin?

I. How often do you have discussions in class when students do most of the talking about what you are learning?

Most of the	1ost of the A lot of		Hardly	Never
time	the time	the time	ever	ivevei

- a. Can you explain why you gave the rating you did?
- b. What are some of the things you talk about and who decides what you talk about?
 - i. Can you give me some examples of discussions in which students do most of the talking?
- c. Do your teachers encourage you to explain why you are giving an answer or making a statement during class discussions?
- d. How does leading discussions help you learn?
- 2. How often do your teachers make connections between what you are learning in class and the "real world" or to you and what matters to you?

	Most of the time	A lot of the time	Some of the time	Hardly ever	Never
ĺ					

- a. Can you explain why you gave the rating you did?
- b. Can you give me some examples of when this happened in class?

3. How often do you feel challenged by assignments in your classes?

Most of the time	A lot of the time	Some of the time	Hardly ever	Never

- a. Can you explain why you gave the rating you did?
- b. How do your teachers help you work through challenges in your classroom assignments?
- c. Do certain classes challenge you more than others? If so, which ones and why?

4. How often do your teachers give students the chance to work with others to complete assignments?

Most of the time	A lot of the time	Some of the time	Hardly ever	Never
diffe	the time	are arric	CVCI	

- a. Can you explain why you gave the rating you did?
- b. How do the group members get selected?
- c. Do group members have specific roles and responsibilities?
- d. What kind of work have you done in a small group this school year?

5. How often do your teachers talk to you about your learning goals for a class?

Most of the	A lot of	Some of	Hardly	Never
time	the time	the time	ever	ivevei

- a. Can you explain why you gave the rating you did?
- b. What does it mean for your teachers to talk to you about your learning goals?
- c. Can you give me an example of a learning goal you have for one of your classes?

6. How often do you monitor your progress (what you already know and what you still need to learn) toward your learning goals?

Most of the time	A lot of the time	Some of the time	Hardly ever	Never

- a. What rating did you give and why?
- b. Can you describe <u>how</u> you are monitoring your progress toward your learning goals? (What tools do you use?)
- c. Can you describe how your teacher helps your monitor your progress?

7. How often do your teachers give you a chance to work on projects or experiments?

Most of the time	A lot of the time	Some of the time	Hardly ever	Never

- a. What rating did you give and why?
- b. Can you give me some examples of projects or experiments you do in your classes?

c. In which subjects do you do projects or experiments?

8. How often do your teachers encourage you to revise your work so it can be of the highest quality possible?

Most of the time	A lot of the time	Some of the time	Hardly ever	Never

- a. What rating did you give and why?
- b. What types of work have you revised this school year (projects, tests, worksheets?)

Thank you so much for participating in this focus group. We will not stop the recording if there are no further comments.

Surveys

Task 3, Task 4, Task 5, and Task 6

ACPS Staff Survey

Alexandria City Public Schools Licensed Instructional Staff Survey

Dear Alexandria City Public Schools Staff Member,

The purpose of this survey is to gather your perspectives on current practices, attitudes, and beliefs regarding the Alexandria City Public Schools' (ACPS) curriculum at the elementary, middle, and high school levels. Your feedback will help inform ACPS about the alignment and implementation of all levels of the ACPS curriculum. The survey will take you approximately 15 minutes to complete.

McREL's policy for the protection of participants follows federal rules and regulations. The reports prepared will summarize findings and will not associate responses with a specific individual; direct quotes will not be included in the reports. Your participation in completing this survey is voluntary, and because it is anonymous and questions are not of a sensitive nature, no known risks are associated with completing this survey. You may choose to stop completing the survey at any time. Should you have any questions about this survey, you may call Dr. Katie Andersen, Director of Research, at 303-632-5567. For information on your rights as a participant, you may call Karen Bumgardner, Managing Researcher and Institutional Review Board Chair at McREL, at 304-347-5841.

Your participation in this survey will help us to continuously improve our schools! Your responses are completely anonymous. Therefore, please be as honest as possible. Thank you for your time and valued feedback.

By clicking the forward arrows and completing this survey, you are consenting to complete the survey as part of ACPS's work with McREL International.

What is your position within Alexandria City Public Schools?

- Classroom Teacher
- o ELL Teacher
- Special Education Teacher
- Content Specialist/Instructional Coach
- Administrator

0	Other	(please	specify	/)	
\circ	Cuici	(picase	Specii	"	

ALL RESPONDANTS COMPLETE

How long have you been employed by ACPS as a licensed educational professional?

- o less than I year
- I 3 years
- \circ 4 7 years
- 8 II years
- o 12 or more years

How long have you been a licensed educational professional?

- o less than I year
- I − 3 years

О	4 – 7 years
0	,
O	12 or more years
At w	nat school level are you currently employed (select all that apply)?
	6
<if e<="" th=""><th>LEMENTARY></th></if>	LEMENTARY>
Becaus	e Lyles-Crouch Traditional Academy utilizes the Core Knowledge curriculum for a majority of
	ts please indicate below whether you are currently a staff member at Lyles-Crouch Traditional
Acade	
0	I am a staff member at Lyles-Crouch Traditional Academy
0	I am NOT a staff member at Lyles-Crouch Traditional Academy
<if e<="" th=""><th>LEMENTARY AND CLASSROOM TEACHER></th></if>	LEMENTARY AND CLASSROOM TEACHER>
Do yo	u currently teach any of the following subjects? (Select all that apply)
	English/Language Arts
П	Mathematics < IF Lyles-Crouch and Mathematics selected, go to math-specific
Ш	questions; if any other subjects selected for Lyles-Crouch, SKIP TO OPEN-ENDED
	QUESTIONS>
П	Science
	Social Science
	Fine Arts
	PE/Health
	Family Life
<u><if m<="" u=""></if></u>	IDDLE OR HIGH SCHOOL AND CLASSROOM TEACHER>
Which	of the following NON-Advanced Placement subject(s) do you currently teach? (Select all that
apply.)	
	English/Language Arts
	Mathematics
	Science
	Social Science
	Career & Technical Education
	Fine Arts
	World Languages
	PE/Health
	Family Life
	Economics/Personal Finance
	None of the above

<IF CLASSROOM TEACHER AND ELEMENTARY, MIDDLE, OR HIGH SCHOOL, AND TEACHES CORE SUBJECTS (English/Language Arts) EXCEPT LYLES-CROUCH TRADITIONAL ACADEMY> NOTE: Repeats for each of the following subject areas: Mathematics <IF LYLES-CROUCH TRADITIONAL ACADEMY ELEMENTARY MATH CLASSROOM TEACHER>, Science <EXCEPT LYLES-CROUCH TRADITIONAL ACADEMY>, Social Science <EXCEPT LYLES-CROUCH TRADITIONAL ACADEMY>

Please indicate the extent to which you agree with the following statements about the ACPS written curriculum:

The ACPS English/Language Arts (Mathematics, Science, Social Science) written curriculum	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure/Does not apply.
is complete for my ELA/Mathematics/Scie nce/Social Science [make specific to content area] course.	ı	2	3	4	5	6	
includes support materials (e.g., online resources, lesson ideas) that are helpful for planning and delivering instruction.	I	2	3	4	5	6	
helps me effectively teach the Virginia Standards of Learning (VA SOLs).	ı	2	3	4	5	6	
must be supplemented with other resources or activities to meet VA SOLs.	I	2	3	4	5	6	
is aligned with the additional support materials provided by ACPS (e.g., (textbooks, ancillary instructional materials, etc.)	I	2	3	4	5	6	
is my primary resource for lesson development and instruction.	I	2	3	4	5	6	

<ALL RESPONDANTS and LYLES-CROUCH MATH EXCEPT Lyles-Crouch Traditional Academy [other subjects] COMPLETE>

Please indicate the extent to which you agree with the following statements about the ACPS written curriculum:

Witten carricalani.		1					
The ACPS written curriculum	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure/Does not apply.
is easy (for teachers [for administrators]) to use.	I	2	3	4	5	6	
is easily accessible from Blackboard (for teachers [for administrators]).	I	2	3	4	5	6	
helps (teachers [for administrators]) increase rigor (e.g., higher-order thinking, challenging learning environment) in the classroom.	I	2	3	4	5	6	
helps (teachers [for administrators]) facilitate student engagement in the content.	I	2	3	4	5	6	
helps (teachers [for administrators]) connect content to real world application or increase relevance to students.	ı	2	3	4	5	6	
provides thorough guidance to help me (teachers [for administrators]) address the needs of English-language learners.	ı	2	3	4	5	6	
provides thorough guidance to help me (teachers [for administrators]) address needs of talented and gifted students.	ı	2	3	4	5	6	
provides thorough guidance to help me (teachers [for	I	2	3	4	5	6	

administrators])							
address needs of							
students with							
disabilities.							
supports (teachers'							
[for administrators])							
assessment of student		2	2	4		6	
progress	•	_		7	3	0	
(achievement) toward							
meeting the VA SOLs.							

<Administrators>

What is the level of implementation of the ACPS written curriculum in your school?

- o not implemented at all
- o planning for implementation
- o partially implemented (e.g., in some subject areas or for some teachers but not all)
- o fully implemented

ALL RESPONDANTS COMPLETE, INCLUDING Lyles-Crouch Traditional Academy

Do ACPS-developed assessments provide data that are useful for guiding your instruction or decision-making?

- Yes
- Somewhat
- o No
- Not applicable

<IF YES, SOMEWHAT, NO> Please explain your response. (500 characters maximum)

Overall, what do you think is the greatest strength of the written curriculum? (500 characters maximum)

Overall, what do you think is the biggest challenge to implementing the written curriculum? (500 characters maximum)

What one change do you think would have the greatest positive impact to the written curriculum moving forward? (500 characters maximum)

Do you have anything else you'd like to add about the written curriculum? (1000 characters maximum)

<ALL RESPONDENTS COMPLETE, INCLUDING Lyles-Crouch Traditional Academy">

Did you participate in any of the professional development related to the ACPS written curriculum offered by the Division within the last 12 months?

- Yes
- o No

If **NO**, what was the primary reason that prevented you from participating?

- o The schedule did not fit with mine.
- I did not think it was relevant.
- o I did not know it was offered.
- o Previous professional development offerings were not valuable
- o I feel like I have a firm understanding of the ACPS written curriculum
- o I don't use the ACPS written curriculum
- o There is no ACPS written curriculum for my teaching subject area
- Other, specify _____

If **YES**...

The professional development related to the ACPS written curriculum in which I participated	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure.
was a good use of my time.	ı	2	3	4	5	6	
improved my knowledge of instructional strategies.	I	2	3	4	5	6	
improved my teaching skills.	ı	2	3	4	5	6	
included follow up opportunities to for ongoing assistance.	ı	2	3	4	5	6	
increased my understanding of how to implement the curriculum in my subject area(s).	ı	2	3	4	5	6	
increased my understanding of how to formatively assess my students as it relates to the curriculum.	I	2	3	4	5	6	

Thank you again for your time and valued feedback!

Parent Survey

PARENT/GUARDIAN SURVEY - McREL ACPS Learning Environment Survey

Please choose your survey language.

- English
- o Spanish
- Arabic

Dear Alexandria City Public Schools Parent,

The purpose of this survey is to gather your perspectives on current practices, attitudes, and beliefs regarding the Alexandria City Public Schools' (ACPS) curriculum at the elementary, middle, and high school levels. Your feedback will help inform ACPS about the alignment and implementation of all levels of the ACPS curriculum. The survey will take you approximately five to 10 minutes to complete.

McREL's policy for the protection of participants follows federal rules and regulations. The reports prepared will summarize findings and will not associate responses with a specific individual; direct quotes will not be included in the reports. Your participation in completing this survey is voluntary, and because it is anonymous and questions are not of a sensitive nature, no known risks are associated with completing this survey. You may choose to stop completing the survey at any time. Should you have any questions about this survey, you may call Dr. Katie Andersen, Director of Research, at 303-632-5567. For information on your rights as a participant, you may call Karen Bumgardner, Managing Researcher and Institutional Review Board Chair at McREL, at 304-347-5841.

Your participation in this survey will help us to continuously improve our schools! Your responses are completely anonymous. Therefore, please be as honest as possible. Thank you for your time and valued feedback.

By clicking the forward arrows and completing this survey, you are consenting to complete the survey as part of ACPS's work with McREL International.

These questions apply to the current 2015/16 school year

How many years have you had a child/children in ACPS?

- o less than one year
- o one to three years
- o four to six years
- o seven plus years

Please select all schools currently attended by your children.

John Adams Elementary School
Charles Barrett Elementary School
Patrick Henry Elementary School
Jefferson-Houston School
Cora Kelly School for Math, Science & Technology
Lyles-Crouch Traditional Academy
Douglas MacArthur Elementary School
George Mason Elementary School
Matthew Maury Elementary School
Mount Vernon Community School

		James K. Polk Elementary School
		William Ramsay Elementary School
		Samuel W. Tucker Elementary School
[Francis C. Hammond Middle School
[George Washington Middle School
		T.C. Williams High School – Main Campus
		T.C. Williams High School – Minnie Howard Campus
[T.C. Williams High School – Satellite Campus
[Chance for Change Academy
[Other (Special Education Private Placement, Sheltercare, etc.)
< f J	eff	ferson-Houston>
Plea	ase	select the grade levels in which you have children enrolled in Jefferson-Houston
Sch		·
		elementary (K-5)
		middle (6-8)
Hov	v v	vould you describe yourself? (select all that apply)
		American Indian or Alaskan Native
		Asian
		Black or African American
		Hispanic or Latino
	_	NI COLUMN TO THE POST OF THE P
		Native Hawaiian or other Pacific Islander
		White

Please indicate the extent to which you agree with the following statements about ACPS in the 2015-2016 school year:

,	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure
ACPS has high expectations for my child(ren)'s academic achievement.	ı	2	3	4	5	6	
ACPS looks and feels like a place where learning occurs.	ı	2	3	4	5	6	
Overall, ACPS is a good place for my child(ren) to learn.	ı	2	3	4	5	6	
ACPS does a good job preparing my child(ren) for the future beyond high school.	ı	2	3	4	5	6	
ACPS does a good job of teaching my child(ren) essential skills (e.g. reading, math, writing).	ı	2	3	4	5	6	

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure
ACPS does a good job teaching my child(ren) "life skills" (e.g. responsibility, critical thinking, collaboration, leadership, social competence).	I	2	3	4	5	6	
ACPS meets the individual academic needs of my child(ren).	ı	2	3	4	5	6	
My child(ren)'s class work assignments are meaningful	I	2	3	4	5	6	
ACPS teachers provide feedback that helps my child(ren) reach his or her academic goals.	ı	2	3	4	5	6	
My child(ren) feels intellectually engaged at ACPS.	ı	2	3	4	5	6	
Overall, I am satisfied with my child(ren)'s academic progress.	ı	2	3	4	5	6	

My child(ren)'s homework assignments are meaningful.

- Strongly Disagree
- o Disagree
- Somewhat Disagree
- o Somewhat Agree
- Agree
- Strongly Agree
- o I'm not sure
- My child(ren) does not have homework

Do you have a child that received ACPS talented and gifted services in the <u>2015-2016</u> school year?

- Yes
- o No

<lf Yes>

Which talented and gifted identified area(s) did your child(ren) receive services in the 2015-2016 school year? (select all that apply)

•	sensor year. (serece an enac apply)
	General intellectual ability
	Specific academic ability (Language Arts)
	Specific academic ability (Math)
	Specific academic ability (Science)
	Specific academic ability (Social Studies)

Please indicate the extent to which you agree with the following statements about ACPS talented and gifted services in the 2015-2016 school year:

The ACPS talented and gifted services:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure
Intellectually challenge my child	1	2	3	4	5	6	
Provide multiple opportunities for acceleration and self-exploration	I	2	3	4	5	6	
Encourage my child to be responsible for his/her own learning	I	2	3	4	5	6	
Provide opportunities for my child to collaborate with others	ı	2	3	4	5	6	
Promote higher levels of thinking	I	2	3	4	5	6	

Do you have a child that received ACPS English-language learner services in the <u>2015-2016</u> school year?

- Yes
- o No

<If Yes>

Please indicate the extent to which you agree with the following statements about the ACPS English-language learner services in the 2015-2016 school year:

The ACPS English-language learner services:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	I am not sure
Validate the language and culture of my child	ı	2	3	4	5	6	
Provide resources and supports that are appropriate for my child's English language proficiency level	ı	2	3	4	5	6	
Assist my child in learning the English language	ı	2	3	4	5	6	
Assist my child in understanding academic content	I	2	3	4	5	6	

Do you have a child that has received ACPS special education services through an individualized education plan (IEP) in the 2015-2016 school year? Yes o No <If Yes> Please indicate the extent to which you agree with the following statements about the ACPS special education services through an IEP in the 2015-2016 school year: The ACPS special education Strongly Strongly I am not Somewhat Somewhat Disagree Agree services: Disagree Agree sure Disagree Agree Provide a variety of ī 2 3 4 5 approaches/strategies 6 to engage my child Provide different methods to assess Ī 2 3 4 5 6 my child's learning needs Respect my child's learning differences by providing ı 2 3 4 5 6 accommodations and/or modifications if needed Provides the services documented in my ı 2 3 4 5 6 child's IEP Would you recommend ACPS to other families? Yes П No □ Undecided Do you plan to re-enroll your child(ren) again next year? □ Yes Nο Undecided If undecided> Why might your child(ren) not attend ACPS next year? (check all that apply) Child/family might move away from the area ☐ I am not satisfied with the school Child does not want to return ☐ Child expects to graduate this year ☐ Other (please specify): _ <If No> Why will your child(ren) not attend ACPS next year? (check all that apply) Child/family is moving away from the area I am not satisfied with the school ☐ Child does not want to return

☐ Child expects to graduate this year

☐ Other (please specify): ___

Please use t	he space below	to share any	additional	thoughts	you have a	about the	ACPS
curriculum.	(500 character	limit)					

Thank you again for your time and valued feedback!