

September 28, 2021

The Honorable Luke E. Torian Chair, House Appropriations Committee Pocahontas Building 900 East Main Street, 13th Floor Richmond, Virginia 23219

The Honorable Janet D. Howell Chair, Senate Finance and Appropriations Committee Pocahontas Building, Room No: E509 PO Box 396 Richmond, Virginia 23218

Dear Sir and Madam:

I am pleased to submit the enclosed report that provides a status update on the Virginia Kindergarten Program (VKRP) and summarizes VKRP data for fall 2019. Item 128h (a-d) directs the Department of Education and the University of Virginia's Center for Advanced Study of Teaching and Learning to use the results of the multi-dimensional Virginia Kindergarten Readiness Program assessments to determine how well the Virginia Preschool Initiative promotes readiness in all key developmental domains assessed and submit such findings to the Chairmen of House Appropriations and Senate Finance Committees.

The enclosed report also provides important context regarding drops in school readiness percentages due to virtual learning, decreases in preschool enrollment and other pandemic related implications on children's early learning and development.

Virginia has taken a great first step in addressing COVID-19 readiness gaps by deepening investments in Virginia Preschool Initiative and Mixed Delivery, resulting in record preschool enrollment for three- and four-year-olds this year. Next steps for VKRP expansion and enhancements in response to COVID-19 are also included in the closing section of the report.

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The Honorable Luke E. Torian The Honorable Janet D. Howell September 28, 2021 Page 2

Please direct questions to Jenna Conway, Deputy Superintendent of Early Childhood Education by email at <u>Jenna.Conway@doe.virginia.gov</u>.

Sincerely,

James F. Lane, Ed.D.

Superintendent of Public Instruction

JFL/JLC/lh

Enclosure



VKRP Status Report for the Chairmen of House Appropriations and Senate Finance Committees

October 2021 Report for the 2020-2021 School Year

Acknowledgements:

This report was prepared jointly by the University of Virginia's Center for Advanced Study of Teaching and Learning (CASTL) and the Virginia Department of Education supported through an appropriation from the Virginia General Assembly to the Virginia Department of Education subcontracted to CASTL. Additional funding was also provided through the federal Governor's Emergency Education Relief (GEER) Fund. The Virginia Kindergarten Readiness Program (VKRP) is implemented by CASTL under the direction of Amanda Williford (williford@virginia.edu).

Correspondence concerning this report should be addressed to Jenna Conway at Jenna.Conway@doe.virginia.gov.

Table of Contents

Executive Summary	1
Overview	7
Introduction	7
Kindergarten VKRP 2020-2021 Results	10
Pre-Kindergarten VKRP 2020-2021 Results	29
Next Steps	33
Conclusion	35
Appendices	37

VKRP Status Report for the Chairmen of House Appropriations and Senate Finance Committees

October 2021 Report for the 2020-2021 School Year

Executive Summary

The Virginia Kindergarten Readiness Program (VKRP) empowers Virginia's teachers and education leaders by providing a comprehensive set of assessments that shine a spotlight on kindergarten readiness and growth in student learning. VKRP is a Virginia standards-aligned, multi-year school readiness assessment system that produces actionable information to guide decisions at the student, classroom, school and division levels before and after kindergarten entry to support student learning. VKRP provides assessments of mathematics, self-regulation, and social skills to complement Virginia's longstanding use of the Phonological Awareness Literacy Screener (PALS). From 2014 through 2018, CASTL implemented VKRP through a voluntary rollout where, each year, an increasing number of divisions elected to implement VKRP. VKRP began statewide kindergarten implementation in the 2019-20 school year. The VKRP team has been developing a preschool extension of VKRP since 2018. The preschool VKRP pilot continued this year in over 350 classrooms, including assessments of more than 4,000 preschoolers within 142 early childhood education programs. This report provides a status update on VKRP, summarizing VKRP kindergarten and pre-kindergarten data from the 2020-2021 academic year.

COVID-19 Disruptions

The worldwide COVID-19 pandemic caused sudden and long-lasting changes to children's lives. The extent to which COVID-19 has and will disrupt students' educational experience and learning is hard to quantify. Children lost connections to their teachers and peers with the initial closure of school buildings and onset of remote learning. Parents and caregivers lost jobs, and some children lost loved ones. These significant disruptions to children's everyday experiences impacted their academic learning and social-emotional development. In the 2020-21 school year, many schools shifted between in person, online, and remote formats due to changing levels of risk in their communities.

Despite these challenges, kindergarten students statewide were assessed using VKRP in the fall of 2020 and spring of 2021, providing a snapshot of where Virginia's kindergarten children stand with regard to their early academic and social-emotional development as we enter the 2021-2022 school year. VKRP also responded to COVID-19 by adding a set of items to address student wellbeing, in order to better capture student social-emotional health in the face of unprecedented disruptions. In this report, we present fall 2020 and spring 2021 VKRP data, including data from assessments of mathematics, self-regulation, social skills, and wellbeing. We also present fall and spring pilot data from the voluntary implementation of the preschool extension of VKRP.

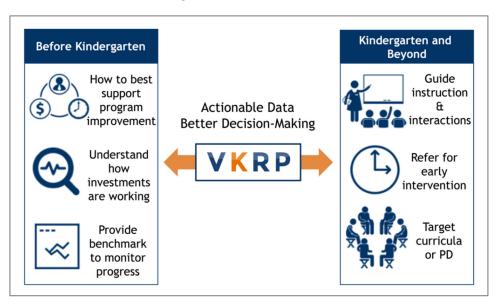
How Statewide Readiness Data Can be Used in Virginia

VKRP highlights the strengths of Virginia's prekindergarten and kindergarten students and brings attention to areas in which students need greater support to maximize their learning. For teachers and school personnel, VKRP and PALS data can be used to drive day-to-day instruction, start conversations with families, and inform decisions about teachers' professional development needs. At the state level, comprehensive readiness data can inform policy decisions and help identify regions in need of the most support.

In this report, we present VKRP data collected during the 2020-2021 school year during the COVID-19 pandemic with the hope that these data will be used by various stakeholders to better understand children's academic and social-emotion development while engaged in various forms of remote, hybrid, or socially-distanced learning. This understanding can

lead to better supports for children during the 2020-2021 school year to assist with recovery from the disruptions to formal learning and to support the continued building of new skills.

Figure 1
How Statewide Readiness Data Can be Used in Virginia



Defining Readiness for Summative Data Purposes

Virginia defines school readiness as, "the capabilities of children, their families, schools, and communities that best promote student success in kindergarten and beyond." The readiness estimate is calculated based upon the expected skill levels of a kindergarten student at the beginning (fall) and end (spring) of the school year. For summative purposes, students are categorized as above the benchmark or ready if they demonstrate minimally expected skills (for fall or spring depending upon the data timepoint) for literacy, math, self-regulation, and social skills. If a kindergarten student does not demonstrate the minimally expected skill in one or more areas at the respective time-point (fall or spring) they are categorized as below the benchmark or not ready. More information regarding VKRP's history, the VKRP measure itself, and how it is used for summative purposes can be found in Appendices C through G.

Kindergarten Students Assessed

In the fall of 2020, teachers assessed approximately 94% of eligible kindergarteners on the PALS literacy assessment and 42% of eligible kindergarteners on the Early Mathematics Assessment System (EMAS) mathematics assessment. Assessment rates for the EMAS were lower for the EMAS because no remote version was available in the fall. Approximately 94% of eligible kindergarteners were rated by teachers on self-regulation and social skills on the Child Behavior Rating Scale (CBRS). 94% of students were also assessed on their well-being. **Statewide**, ~37% of kindergarten students enrolled in the fall of 2020 had complete VKRP data on literacy (PALS), math, self-regulation, and social skills assessments in the fall of 2020. This lower percentage of students with complete assessments was due to the large number of students engaged in remote learning and there was no remote assessment option available for the EMAS in fall 2020.

In the spring of 2021, approximately 99% of eligible kindergarteners were assessed on the PALS literacy assessment, 95% were assessed on the EMAS mathematics assessment, and 97% were rated by teachers on self-regulation and social skills using the CBRS. 97% percent were also assessed on their well-being. **Statewide, ~87% of kindergarten students enrolled in the spring of 2021 had complete VKRP data on literacy (PALS), math, self-regulation, and social skills assessments in the spring of 2021.** This higher percentage of complete assessments, particularly for the EMAS, were

largely due to more children attending school in-person in the spring of 2021 and the availability of a remote version of the EMAS mathematics assessment.

Key Findings

Below we summarize the key findings from the 2020-21 school year. It is difficult to overestimate the traumatic impact that COVID-19 has had on many children's lives. Education leaders and teachers were faced with the challenge to quickly transition from in-person to socially distanced, virtual, and remote learning—learning formats that are not conducive to connecting with and teaching young children. Parents and caregivers lost their jobs, students lost connections to their peers, and some students lost loved ones. The disruptions that COVID-19 had on the school experience for students and teachers are reflected in the data we present below, in the implementation supports we offered to the field, and in our plans moving forward.

In the fall of 2020, there was no remote option for the EMAS math assessment, resulting in many students not being assessed in math. The VKRP team quickly designed a remote assessment option and made it available in the spring of 2021. In both the fall of 2020 and the spring of 2012, many teachers reported that they did not interact enough with their students to feel confident in their assessments of students' self-regulation and social skills or their well-being.

Fall 2020 VKRP Data

~37% of kindergarten students were assessed on all four measures. This lower percentage of students with complete assessment data was due to the large number of students engaged in remote learning without a remote assessment option for the EMAS in fall 2020.

Approximately 55% of fully-assessed students met the benchmark in all four areas-literacy, mathematics, self-regulation and social skills. This means that **45% of kindergarteners fell below the benchmark in one or more foundational areas of learning in fall 2020**.

Figure 2
Fall 2020 VKRP Statewide Results



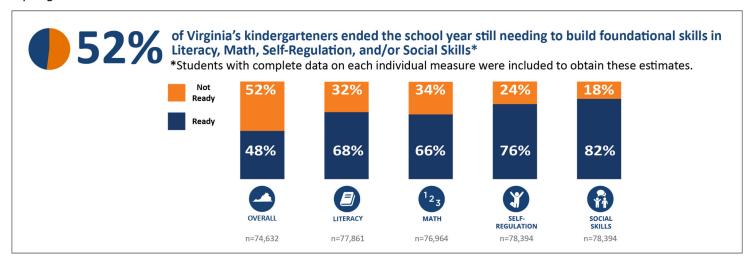
Spring 2021 VKRP Data

~87% of kindergarten students were assessed on all four measures. This higher percentage of students with complete data was due to the availability of a remote option for the EMAS math assessment.

Approximately 48% of these children met the benchmark on all four assessments. More than half (52%) of Virginia's kindergarteners ended the school year still needing to build foundational skills in literacy, math, self-regulation, and/or social skills.

This is the first year that kindergarten students statewide were assessed on VKRP in the spring. COVID-19 school closures in the spring of 2020 resulted in VKRP not being administered in the spring of 2020. As such, there are no prior years' data to compare with this year's results. However, it is likely that the spring 2021 proportion of children not meeting the benchmark is higher than would be expected in a typical year and represents a seven-percentage point increase from fall 2020 in students categorized as below benchmark.

Figure 3
Spring 2021 VKRP Data



Students with Public Preschool Experience were More Likely to be Classified as Ready

For students coming from low-income backgrounds, children who participated in public preschool were significantly more likely to arrive to kindergarten in fall of 2020 demonstrating readiness skills (48% ready) compared to children from low-income backgrounds who were reported to not attend any preschool (32% ready). In the spring, children from low-income backgrounds who participated in public preschool continued be more likely to meet or exceed the spring benchmark (33% ready) compared to children who were reported to not attend any preschool (28% ready).

Readiness Estimates Vary by Student Demographic Characteristics

Students falling below the benchmark at the beginning and end of kindergarten were disproportionately more likely to be students from low-income backgrounds, students with a disability, students who are English language learners, and students who are Black or African American, Hispanic/Latino of any race, American Indian or Alaska native, or students of 2 or more races. These patterns point to systemic disparities in opportunities and educational experiences available to students and their families both pre-pandemic (e.g., systemic racism, access to high quality early learning opportunities that meets children's cultural, linguistic, and developmental needs) and post-pandemic (e.g., availability of in-person instruction, access to technology, opportunity for individualized instruction, access to special education services), and elevate concerns that disparities were likely exacerbated during the 2020-2021 school year.

- In fall 2020, about 56% of students from low-income backgrounds did not meet the fall VKRP benchmark. In spring 2021, 67% of students from low income-backgrounds did not meet the spring benchmark.
- In fall 2020, 66% of students with a disability did not meet the fall VKRP benchmark.

In spring 2021, 75% of these students did not meet the spring benchmark.

- In fall 2020, 70% of students who were English language learners did not meet the fall VKRP benchmark. In spring 2021, 70% of ELL students did not meet the spring benchmark.
- In fall 2020, 60% of Hispanic/Latino of any race, 57% of American Indian or Alaska native, 54% of Black or African American, 48% of students who were 2-or more races, 39% of White, 33% of Native Hawaiian or Pacific Islander, and 31% of Asian students did not meet the benchmark.
 - In spring 2021, 68% of Hispanic/Latino of any race, 49% of American Indian or Alaska native, 65% of Black or African American, 48% of students who were 2-or more races, 42% of White, 47% of Native Hawaiian or Pacific Islander, and 35% of Asian students did not meet the benchmark.

Supporting Kindergarten Student's Social-Emotional Development – New Well-Being Data

To provide more information on students' well-being during COVID-19, VKRP added new teacher report items to better understand teachers' perceptions of students' mental health and well-being. Teachers reported being moderately, very, or extremely concerned about the mental health and social-emotional well-being for about 11% of kindergarten students. This estimate was stable from fall to spring.

In a survey of teachers' perceptions of students' well-being, teachers expressed concerns with the effects of virtual instruction on students' social-emotional development and well-being. One kindergarten teacher noted:

I have taught virtually for the entire school year. I'm very concerned about my students' social skills and self-regulation since they have never been in a classroom setting. The transition for some students from home where a parent is helping them to 1st grade on their own may be difficult.

Continued Preschool VKRP Piloting

An equitable, culturally and linguistically sensitive, high quality preschool experience supports young children to develop school readiness skills and helps prepare them for kindergarten. Since 2015 (the beginning of VKRP's statewide rollout), division and program leaders, principals, and teachers have repeatedly asked for early learning assessments that measure preschool children's growth over time. Our team has been working on a preschool extension of VKRP since 2018. Longitudinal data allows preschool programs to examine their student school readiness data to determine progress toward meeting goals for student learning within the preschool year and across years over time to inform continuous improvement of the preschool experience and to target funds toward quality improvement efforts aligned with the data (e.g., services provided to support teacher-child interactions, professional development, curriculum). At the individual child level, VKRP data can be used to better individualize instruction, experiences, and services to support a young child's learning and development.

The preschool VKRP pilot continued this year in over 350 classrooms, including assessments of more than 4,000 preschoolers within 142 early childhood education programs. Although the pilot sample is small relative to Virginia's public pre-k population and is not representative of that population, the results indicate that teachers were able to administer the assessments with high levels of fidelity, that the measures function well for preschool students, and that the system is ready for scale in the 2021-22 school year for 4-year-old students.

Future Directions

Virginia's youngest learners come to preschool and kindergarten having had many different experiences and varied exposure to early learning opportunities. This will be especially true for this coming 2021-22 school year, as the global pandemic has led to disruption, stress, and in some cases, trauma, for our preschool and kindergarten learners. The large differences in children's learning experiences during the 2020-2021 school year will result in classrooms where the variation across students' skills will be wider (classrooms will be more heterogeneous than in the past with respect to children's academic and social-emotional skill development) compared to prior years.

Students will need tailored academic and social-emotional supports across the school year to engage in unfinished learning and to continue building new skills. This coming school year, accelerating student progress while attending to students' social-emotional needs will require divisions and schools to be proactive in determining how to support teachers and meet each student's needs.

Educators and administrators can use VKRP data, in combination with other formative and summative assessments to help target individualized instruction, determine teacher professional development needs, and at the state level, inform policy decisions and help identify regions in need of the most support.

In the 2021-2022 school year VKRP is:

- **Expanding**. VKRP will be used in publicly funded prekindergarten classrooms. VKRP data in pre-k will allow teachers to better understand the early foundational skills that young children are bringing to the classroom, and to provide rich interactions and learning opportunities to support growth and development.
- **Extending**. In collaboration with PALS, VKRP is developing and testing an extension of the VKRP assessments to be used with children as young as 3-years-old.
- **Collaborating.** VKRP is closely collaborating with PALS around the development and implementation of PALS pre-k, PALS 2.0, and PALS en Español. The teams regularly work together on assessment development, technology system development and expansion, data integration, teacher and administrator training, and data usage and reporting.
- **Flexing**. The VKRP will continue to provide both in person and remote assessments and provide guidance to divisions on how to assess students regardless of their mode of instruction.
- **Supporting**. As we have done in kindergarten, VKRP will support pre-k teachers and programs by providing high-quality training opportunities, just-in-time supports, access to data reports, and a suite of high-quality instructional resources.

Overview

Summary of Appropriations Language

The Virginia Department of Education and the University of Virginia's Center for Advanced Study of Teaching and Learning (CASTL) are providing this report to the Chairmen of House Appropriations and Senate Finance Committees to share the results of the Virginia Kindergarten Readiness Program in accordance with HB30 Item 137.H, as described below:

- a. Out of this appropriation, \$1,350,000 the first year (2020-2021) and \$1,350,000 the second year (2021-2022) from the general fund is provided through the Department of Education to the University of Virginia to continue statewide implementation of the Virginia Kindergarten Readiness Program conducted in the fall, and to develop and implement a post-assessment upon the conclusion of the kindergarten year.
- b. The Department of Education shall coordinate with the University of Virginia's Center for Advanced Study of Teaching and Learning to ensure that all school divisions shall be required to have their kindergarten students assessed annually during the school year using the multi-dimensional kindergarten readiness assessment model. All school divisions shall be required to have their kindergarten students assessed with such model.
- c. Further, out of this appropriation, \$100,000 the first year (2020-2021) and \$100,000 the second year (2021-2022) from the general fund shall be allocated to University of Virginia's Center for Advanced Study of Teaching and Learning to provide training to school divisions annually on how to effectively use Virginia Kindergarten Readiness Program data to improve instructional practices and student learning. Such teacher focused professional development and training shall be prioritized for the school divisions that would most benefit from state assistance in order to provide more time for classroom instruction and student learning.
- d. The Department and the University of Virginia's Center for Advanced Study of Teaching and Learning shall use the results of the multi- dimensional Virginia Kindergarten Readiness Program assessments to determine how well the Virginia Preschool Initiative promotes readiness in all key developmental domains assessed. The Department shall submit such findings using data from the prior year's fall assessment to the Chairmen of House Appropriations and Senate Finance Committees no later than October 1 each year.

Introduction

Virginia defines school readiness as, "the capabilities of children, their families, schools, and communities that best promote student success in kindergarten and beyond. Each component – children, families, schools and communities – plays an essential role in the development of school readiness. For Virginia's youngest citizens, a "ready" child is prepared socially, personally, physically, and intellectually in the areas of literacy, mathematics, science, history and social science, physical and motor development, and personal and social development."¹

The Virginia Kindergarten Readiness Program (VKRP) is an initiative focused on building a more comprehensive understanding of children's school readiness in Virginia. As an assessment system of children's early learning skills, VKRP adds measures of mathematics, self-regulation, and social skills to complement Virginia's statewide assessment of literacy skills using the Phonological Awareness Literacy Screening (PALS). Although not fully comprehensive of all the

¹ "School Readiness," Virginia Department of Education. Retrieved from http://www.doe.virginia.giv/instruction/early_childhood/school_readiness

skills children need to thrive in school and life, VKRP provides reliable and valid data across indicators known to predict school success in the short and long term – and puts an equal emphasis on academic and social-emotional skills. Children develop school readiness skills through their early experiences at home, school, and in the community. It is important to acknowledge that VKRP is not a measure of a school's or a community's readiness.

The VKRP readiness estimate is calculated based upon the expected skill levels of a kindergarten student at the beginning (fall) and end (spring) of the school year. For summative purposes, students are categorized as above the benchmark (or "ready") if they demonstrate minimally expected skills (for fall or spring depending upon the data timepoint) for literacy, math, self-regulation, and social skills. If a kindergarten student does not demonstrate the minimally expected skill in one or more areas at the respective time-point (fall or spring), they are categorized as below the benchmark – or, "not ready." More information regarding VKRP's history, the VKRP measure itself, and how it is used for summative purposes can be found in Appendices C through G.

Inequity in Early Learning Opportunities

Many children do not have access to equitable, high-quality early learning opportunities needed to demonstrate the foundational and developmentally expected understanding of letters, numbers, or behavioral and social skills. The discrepancies in the VKRP data, particularly with respect to race and ethnicity, exemplify the results of systematic racism, including the systems in place that create and maintain racial inequality, in our early care and education settings before students enter kindergarten. The years leading up to kindergarten matter. Children who are from historically marginalized racial backgrounds, those who are Black or African American, Hispanic/Latino of any race, American Indian, or Alaska native, are less likely to be provided opportunities to experience high-quality early childhood education compared to their White peers. Similarly, children who come from low-income backgrounds, who are more likely to be children who are Black or African American, Indigenous, and people of color (BIPOC), are less likely to have access to high-quality early childhood education compared to their economically advantaged peers. These and other gaps in opportunities for high-quality early educational experiences and learning perpetuate educational inequities across students before and after kindergarten.

Longitudinal research has demonstrated that early differences in school readiness skills can persist and be compounded over time. While VKRP data show the variation in children's skill levels at the start of school, VKRP data do not measure a student's cognitive potential or capacity for growth in skills over time. Children's academic and social-emotional skills are most malleable in early childhood, and investments made in early childhood from birth through third grade have the best rate of return. However, current investments in early learning lag far behind those made in K-12. For example, early childhood teachers in private and family settings, where many children of color are served, often make below the minimum wage. Policies do not ensure that educators are adequately trained and compensated for their work, or that students facing multiple barriers and are the farthest from opportunity have access to **high-quality** early childhood experiences in settings where they can thrive.

VKRP enables Virginia to establish a more comprehensive, consistent statewide estimate of student's school readiness skills in kindergarten. VKRP provides detailed, actionable information to guide decisions at various levels before and after kindergarten entry to support student learning. For example, kindergarten teachers can use the data to tailor their instruction to a student's current skill level and provide the right scaffolding to get them to the next level, refer a student for additional assessment or support, and have conversations with families to support students' learning at home. Principals and school leaders can use the data to answer questions to better understand each incoming cohort of students, inform decisions for deploying existing resources, and procure additional supports. Division leaders can use the data to look for variability within and across divisions, individualize professional development to teachers, and align preschool, kindergarten, and elementary programming. State leaders, advocates, and policy makers can use the data to identify statewide readiness gaps, align support for early childhood program supports, examine how services prior to kindergarten promote improved readiness, and examine data over time to identify patterns and trends across the state.

VKRP data help key players in classrooms, schools, divisions, and government make data-informed decisions about how to best meet the needs of Virginia's youngest students and to invest strategically in early childhood initiatives. VKRP and other sources of early childhood education data can be used to identify readiness gaps, track system-level trends, and inform effective allocation of education resources. However, VKRP was not designed to be reliable within a high-stakes accountability environment and is not suited for use as a specific consequence to students, teachers, or schools/programs.

VKRP During the COVID-19 Pandemic

Due to COVID-19, many school divisions offered remote instruction and/or put in place health and safety precautions when teachers and students were together in-person. These unprecedented school disruptions presented challenges for teachers to complete the VKRP assessments in the fall of 2020 and the spring of 2021.

In the fall of 2020, there was no remote option for the EMAS math assessment, resulting in many students not being assessed in math. In response, the VKRP team quickly designed a remote assessment option and made it available in the spring of 2021. In both the fall of 2020 and the spring of 2022, many teachers reported that they did not interact enough with their students to feel confident in their assessments of students' self-regulation and social skills, or their well-being.

In close communication and partnership with VDOE, the VKRP team provided guidance and support to school divisions during the fall 2020 and spring 2021 assessments. The assessment windows were expanded to allow divisions more time to assess all students. Teachers received guidance on observing and rating self-regulation and social skills within an online instructional model and guidance about conducting in-person assessments in accordance with health and safety guidelines. The VKRP team developed a fully remote option for the spring 2021 mathematics assessment (EMAS) and created and mailed sets of manipulatives to school divisions that they could send to families' homes to be used while conducting the remote version of the EMAS. The VKRP team expanded hotline support and provided virtual trainings to help divisions prepare teachers to use the remote EMAS.

In response to the concern of children's mental health and well-being resulting from COVID-19 disruptions, VKRP created and added items to the CBRS rating scale to address the mental health needs of students as well as to ascertain levels of concern for students based on teacher feedback.

In both the fall and spring of the 2020-2021 academic year, the VKRP team requested feedback from teachers and administrators. Educators reported teaching to be extremely difficult during the pandemic and worried about students who they "only knew through a screen," and therefore, found it difficult to rate items on the CBRS that dealt with social aspects of school. Overwhelmingly, educators worried about the impact COVID would have on all aspects of student achievement and well-being in future years.

Moving forward, VKRP and VDOE continue to work with educators to understand children's school readiness skills during continued COVID-19 disruption. During the 2021-22 school year, teachers will be able to complete the fall and spring assessments in-person or remotely. Through additional funding from the state as well as the federal Governor's Emergency Education Relief (GEER) Fund, preschool teachers will assess pre-kindergarten children's early learning skills in all state-funded 4-year-old classrooms. The VKRP team will also develop a downward extension of VKRP to be used with 3-year-old students. The goal is for the VKRP assessment system to be available for use in classrooms serving preschool students beginning at age three through kindergarten across a variety of ECE sectors including public preschool and kindergarten, Head Start, private early childhood education (ECE) programs, childcare programs, and family day homes. Data from this assessment will give stakeholders a better picture of how students are developing from preschool through kindergarten and to develop and monitor ECE programming to create more equitable opportunities for all young learners in Virginia.

Kindergarten VKRP 2020-2021 Results

Below, we present summary data from the 2020-2021 school year. We provide the fall 2019 data (pre-pandemic) for comparative purposes. Caution must be used when comparing data across years. The students assessed in the fall of 2019 are reasonably representative of the statewide population of kindergarten students for that year, as 92% of enrolled students had complete VKRP data. The fall 2019 data are pre-pandemic. In contrast, the fall 2020 data represent only 37% of kindergarten students enrolled in fall 2020. In spring 2021, the data represent 87% of kindergarten students enrolled in the spring of 2021.

Background

Assessment Methods

Children were directly assessed on the Early Mathematics Assessment System (EMAS) mathematics assessment and PALS literacy assessment by their classroom teachers, instructional assistants, and/or other members of school personnel (e.g., math leads, literacy specialists). Teachers completed Child Behavior Rating Scale (CBRS) ratings of children's self-regulation, social skills, and well-being. Teachers were trained on how to administer the EMAS and CBRS either at an in-person training hosted by the VKRP team, by a trainer designated by the school division, or by completing online training modules. Most teachers were trained on the PALS by a trainer designated by the school division. More information regarding the VKRP assessment components and its history of implementation can be found in Appendices C through G.

The fall 2020 testing windows were August 24-November 3, 2020 for PALS and July 15-November 19, 2020 for VKRP. However, due to the pandemic's continued impact on instructional modes, VKRP extended the fall assessment term to January 31, 2021. The spring 2021 testing windows were April 26th-June 4th, 2021 for PALS and April 19-June 11, 2021 for VKRP. In the fall, students had to be tested in-person on the EMAS, although PALS did provide a remote testing option. In the spring, both PALS and EMAS had remote testing options. In addition to the existing training and guidance materials, teachers were provided training on how to administer assessments in accordance with health and safety guidelines and how to observe and rate children's behaviors during virtual-only instruction.

VKRP Demographic Data

In the 2020-2021 academic year, 133 of 134 school divisions participated, at some level, in VKRP. The Virginia School for the Deaf and Blind did not participate because it did not have any enrolled kindergarten students. James City County Schools' data was merged with Williamsburg City's VKRP data. In total, 1,110 Virginia schools implemented VKRP in the fall, resulting in data from 5,090 classrooms and 83,841 students. These numbers increased to 1,113 schools, 5,122 classrooms, and 85,670 students in the spring assessment term. Individual division readiness results for both fall 2020 and spring 2021 are within Appendix A.

The student demographic data are presented in Table 1. Demographic data from fall 2020 showed a substantial 10.7% drop in kindergarteners in the VDOE data system when compared to the fall of 2019. The fall 2020 sample includes slightly more Asian, Black or African American, and Hispanic/Latino of any race students, and slightly fewer White students compared to the 2019-2020 school year. Although the proportion of students from low-income families stayed level from fall 2019 to fall 2020, there was a 7.5% increase in the number of students from low-income backgrounds from the fall 2020 to spring 2021. This change is likely a result of the impact of COVID-19 and may be due to additional children enrolling in kindergarten after the start of the school year (there were more enrolled students in the spring compared to fall), shifts out of the public school system by some families, or increases in the number of families identified as economically disadvantaged (low-income). These data are descriptive only, and we cannot say with certainty why the demographic composition of kindergarteners changed.

Table 1VKRP Demographic Summary for the Fall 2019 (pre-pandemic), Fall 2020, and Spring 2021

		2019 Fall N=93,929	2020 Fall N=83,841	2021 Spring N=85,670
	_	Mean (SD) or n (%)	Mean (SD) or n (%)	Mean (SD) or n (%)
Gender	Female	44,889 (48.4%)	39,216 (48.4%)	41,038 (48.4%)
	Male	47,854 (51.6%)	41,751 (51.6%)	43,838 (51.6%)
Race	American Indian or Alaska Native	268 (0.3%)	233 (0.3%)	241 (0.3%)
	Asian	6,388 (6.9%)	5,907 (7.3%)	6,108 (7.2%)
	Black or African American	19,133 (20.6%)	17,588 (21.7%)	18,601 (21.9%)
	Hispanic/Latino of any race	16,116 (17.4%)	14,846 (18.3%)	15,811 (18.6%)
	White	44,233 (47.7%)	36,347 (44.9%)	37,757 (44.5%)
	Native Hawaiian or Other Pacific Islander	151 (0.2%)	120 (0.1%)	128 (0.2%)
	Non-Hispanic/Latino of any race, two or more races	6,454 (7.0%)	5,927 (7.3%)	6,235 (7.3%)
Socioeconomic Status	Students from low-income backgrounds a	35,323 (38.1%)	30,680 (37.9%)	38,525 (45.4%)
Preschool Experience	Public Preschool	32,399 (34.9%)	30,527 (37.8%)	31,643 (37.4%)
	No Preschool	21,021 (22.7%)	19,181 (23.8%)	20,458 (24.2%)
Disability	Students with a disability b	8,969 (9.7%)	7,909 (9.8%)	9,519 (11.3%)
English Learner	ELL=Y ^c	13,798 (14.9%)	13,667 (16.9%)	13,220 (15.6%)

^aSource: SRC (Student Record Collection) Disadvantaged Status Flag. Students are identified as economically disadvantaged if, at any point during the school year, the student: 1) is eligible for Free/Reduced Meals, 2) receives TANF, or 3) is eligible for Medicaid. In 2020-21 Free/Reduced Meals applications are not collected in schools participating in the Community Eligibility Program (CEP). Students in CEP schools are identified as economically disadvantaged based primarily on direct certification data. Students identified as eligible for Medicaid and students identified as experiencing Homelessness will continue to be identified. This information is outlined in Superintendent's Memo #104-14.

^bSource: SRC Primary Disability Code. Students are identified as having a disability if any code is present *except* Qualified Individual under Section 504.

^cSource: SRC LEP Status Code. Students are identified as ELL if code is Identified as EL and receives EL services, Identified as EL but has refused EL services, or Identified as formerly EL for each of the four years after exiting EL services.

Who was assessed during the 2020-2021 school year?

In a typical year, VKRP and PALS assessments have a very high rate of completion (e.g., 96 – 99% in fall 2019). In the fall of 2020, completion rates were lower, particularly for the EMAS, because many students attended school remotely and some divisions did not allow for students in to be tested in-person. PALS provided a remote version of the literacy assessment, and the CBRS rating scales could be completed based on online interactions and observations. By the spring of 2021, EMAS was also available as a remote assessment.

Completion rates were well above 90% for all assessments at all time points except for the fall 2020 EMAS (Table 2). EMAS and CBRS exemptions from testing, which are usually reserved for children who cannot be validly assessed due to developmental disabilities or home languages other than English or Spanish, were significantly higher at both time points. This high exemption rate was due largely to some children learning remotely who had little access to reliable internet, students whose families were unable to/chose not to bring students in for in-person assessments, or families being quarantined due to COVID-19 during the assessment term.

Table 2 *VKRP Assessment Completion*

		2019-20 Fall N=93,929	2020-21 Fall N=83,841	2020-21 Spring N=85,670
		n (%)	n (%)	n (%)
PALS	Incomplete	294 (0.4%)	3,620 (5.3%)	606 (0.9%)
	Complete, Standard	77,993 (99.4%)	64,013 (94.4%)	67,928 (98.8%)
	Complete, Non-Standard	214 (0.3%)	189 (0.3%)	197 (0.3%)
Fairfax iReady/EIRI	Complete ^a	12,169 (13.0%)	9,073 (10.8%)	9936 (11.6%)
EMAS	Not Tested	2,582 (2.8%)	2,864 (3.6%)	1404 (1.7%)
	In Progress, Standard	208 (0.2%)	152 (0.2%)	116 (0.1%)
	In Progress, Non-Standard	1 (0.0%)	-	-
	Complete, Standard	88,588 (96.4%)	33,319 (41.6%)	49,804 (61.8%)
	Complete, Remote	-	-	26,831 (33.3%)
	Complete, Non-standard	94 (0.1%)	38 (0.0%)	64 (0.1%)
	Complete, Exempt	469 (0.5%)	43,766 (54.6%)	2,228 (2.8%)
CBRS	Not Tested	3,357 (3.7%)	2,190 (2.7%)	1,504 (1.9%)
	Complete, Standard	88,440 (96.2%)	75,653 (94.4%)	78,394 (96.9%)
	Complete, Exempt	146 (0.2%)	2,296 (2.9%)	1,018 (1.3%)

Note. Use caution when comparing data across years (see p.15 for explanation).

Table 3 provides demographic characteristics of those children who were assessed across all four subtests, suggests that fall 2020 reliance on in-person EMAS assessments may have skewed the population sample. In fall 2020, the fully assessed population was proportionately more White, from higher income backgrounds, and more monolingual English-speaking compared to the fall of 2019 and the spring of 2021. This is important to note, as this is the sample of children upon which kindergarten readiness estimates for fall 2020 are based, which are reported in detail below. These differences are large enough to meaningfully shift students' results related to benchmarks and may mean that our fall

iReady flag not assigned in fall 2020-21.

2020 results overestimated students' readiness for kindergarten and underestimates the toll of the pandemic for children's readiness skills at kindergarten entry. In previous years' data, students that were White, from higher income backgrounds, and English-speaking have been more likely to meet or exceed benchmarks than students who were from low-income backgrounds, English language learners, or who came from historically minoritized racial and ethnic groups.

Table 3 *VKRP Fully Assessed Students and Their Demographic Characteristics*

		Mean (SD) or n (%)	Mean (SD) or n (%)	Mean (SD) or n (%)
Gender	Female	41,751 (48.9%)	15,073 (48.9%)	36,245 (48.9%)
	Male	43,665 (51.1%)	15,742 (51.1%)	37,809 (51.1%)
Race	American Indian or Alaska Native	228 (0.3%)	75 (0.2%)	195 (0.3%)
	Asian	5,859 (6.9%)	587 (1.9%)	5,463 (7.4%)
	Black or African American	17,780 (20.8%)	5,532 (18.0%)	15,845 (21.4%)
	Hispanic/Latino of any race	13,880 (16.2%)	3,642 (11.8%)	13,619 (18.4%)
	White	41,475 (48.6%)	18,535 (60.1%)	33,364 (45.1%)
	Native Hawaiian or Other Pacific Islander	142 (0.2%)	45 (0.1%)	104 (0.1%)
	Non-Hispanic/Latino of any race, two or more races	6,052 (7.1%)	2,399 (7.8%)	5,469 (7.4%)
Socioeconomic Status	Students from low-income backgrounds ^a	31,874 (37.3%)	11,369 (36.9%)	33,163 (44.8%)
Preschool	Public Preschool	28,895 (33.8%)	12,194 (39.8%)	26,830 (36.4%)
Experience	No Preschool	18,811 (22.0%)	6,898 (22.5%)	17,097 (23.2%)
Disability	Students with a disability ^b	6,773 (8.0%)	2,797 (9.1%)	6,839 (9.3%)
English Learner	ELL=Y ^c	11,464 (13.4%)	1,789 (5.8%)	11,188 (15.1%)

^aSource: SRC (Student Record Collection) Disadvantaged Status Flag. Students are identified as economically disadvantaged if, at any point during the school year, the student: 1) is eligible for Free/Reduced Meals, 2) receives TANF, or 3) is eligible for Medicaid. In 2020-21 Free/Reduced Meals applications are not collected in schools participating in the Community Eligibility Program (CEP). Students in CEP schools are identified as economically disadvantaged based primarily on direct certification data. Students identified as eligible for Medicaid and students identified as experiencing Homelessness will continue to be identified. This information is outlined in Superintendent's Memo #104-14.

^bSource: SRC Primary Disability Code. Students are identified as having a disability if any code is present *except* Qualified Individual under Section 504.

^cSource: SRC LEP Status Code. Students are identified as ELL if code is Identified as EL and receives EL services, Identified as EL but has refused EL services, or Identified as formerly EL for each of the four years after exiting EL services.

Use caution when comparing data across years

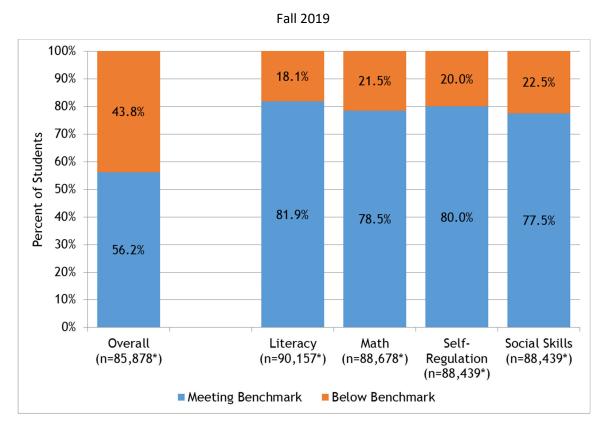
When comparing fall 2019, fall 2020, and spring 2021 data, keep in mind the substantial changes to 1) the population of students attending school at each time-point, 2) the availability of different modes of assessment (the addition of the remote option in spring of 2021), 3) the differences in the percentage of students with complete VKRP data (data on all four assessments), and 4) the significant disruptions to the kindergarten learning context. Because of these differences, fall 2019, fall 2020, and spring 2021 data are not directly comparable.

Readiness Estimates in the 2020-21 School Year

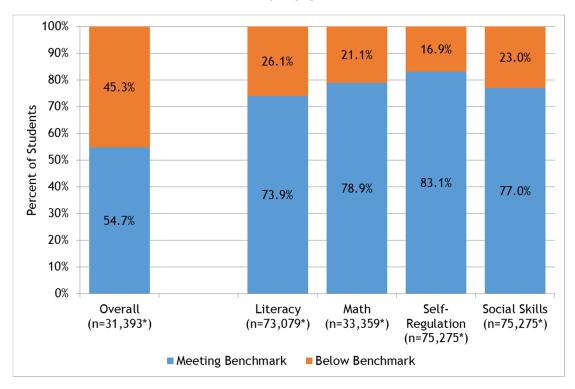
Readiness estimates for the 2020-21 school year are provided in Figure 4. The fall 2019 data are provided for reference. The data from the 2020-2021 school year indicate that 45% children fell below the VKRP benchmark in the fall of 2020. This was similar to the fall of 2019 (44%). In contrast, by the end of the 2020-21 school year, more than half of students (52%) fell below the spring VKRP benchmark.

There was a significant increase in the number of children falling below the literacy benchmark in the fall of 2020 and the spring of 2021. Mathematics results were consistent from fall 2019 to fall 2020 but in the spring 2021, many more students fell below the spring benchmark. In the fall of 2019, 20% and 23% of students fell below the benchmark in self-regulation and social skills respectively. In fall 2020, these percentages were similar at 17% (self-regulation) and 23% (social skills). In the spring of 2021, the percentages were 24% (self-regulation) and 18% (social skills). The demonstration of self-regulation and social skills are contextually and situationally dependent—they vary depending upon context. The disruptions in children's kindergarten learning environment during the 2020-21 school year (e.g., learning at home in front of a screen, learning at school socially distanced from peers and wearing a mask, transitioning from virtual to in-person learning) makes it impossible to make comparisons in across data timepoints. Teachers expressed feeling uncertain of their ratings when assessing students in a virtual learning context.

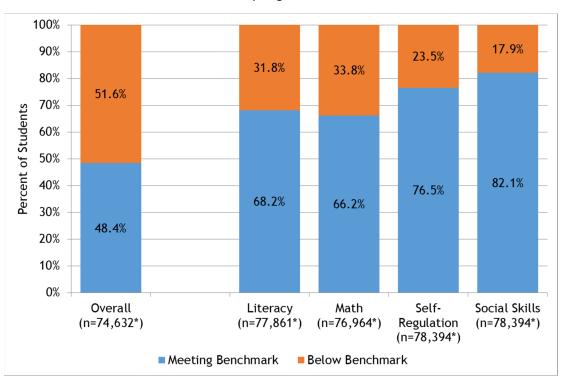
Figure 4Fall 2019, Fall 2020, Spring 2021 Overall and Domain Readiness Estimates



Fall 2020



Spring 2021



Student Well-Being Data

COVID-19 has had a traumatic impact on many children's lives. Parents and caregivers lost their jobs, students lost connections to their peers, and some students lost loved ones. In response, for the 2020-21 school year, VKRP added new teacher report items to better understand teachers' perceptions of students' mental health and well-being.

The newly added well-being items capture students' behaviors and feelings, including items like "adapts when things change; goes with the flow" and "calms down after being upset, frustrated, or angry." Items are rated on a scale of 1 to 5, with higher scores indicating greater well-being. Additionally, teachers were asked to rate their general level of concern for each student's well-being on a scale of 1 ("not at all") to 5 ("extremely").

The average overall well-being score was 4.23 out of 5 in the fall of 2020 and 4.42 out of 5 in the spring of 2021. Teachers reported having no concerns about student well-being for 71% and 72% of students in the fall and spring, respectively. Teachers reported being moderately, very, or extremely concerned about the mental health and social-emotional well-being for about 11% of kindergarten students. These estimates were stable from fall to spring.

In a survey of teachers' perceptions of students' well-being, teachers expressed concerns with the effects of virtual instruction on students' social-emotional development and well-being. One kindergarten teacher noted:

I have taught virtually for the entire school year. I'm very concerned about my students' social skills and self-regulation since they have never been in a classroom setting. The transition for some students from home where a parent is helping them to 1st grade on their own may be difficult.

Variability in Readiness Estimates Disaggregated by Student Characteristics

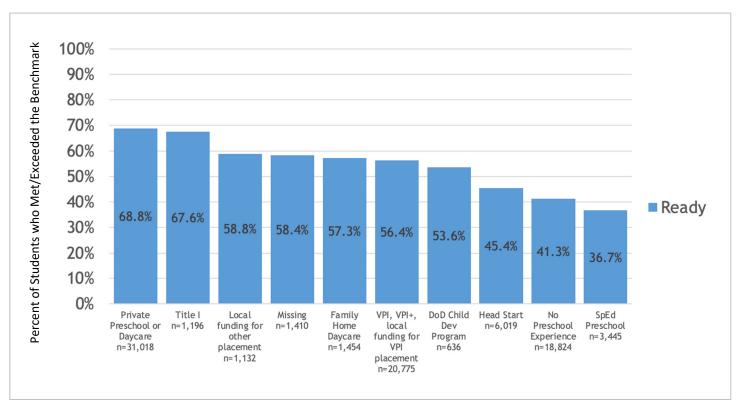
In this section, we disaggregate the school readiness benchmark data in fall and spring according to a variety of student characteristics. We present the breakdowns of VKRP data by preschool experience first because this is specifically requested in the budget appropriation language. Following that, we provide the VKRP data according to student disability status, English language learner status, race, gender, and age. These data must be interpreted cautiously. Associations between student characteristics and VKRP data do not provide causal evidence that a student characteristic leads to having higher or lower scores on the VKRP assessments.

Kindergarten Readiness Disaggregated by Parent Reported Preschool Experience

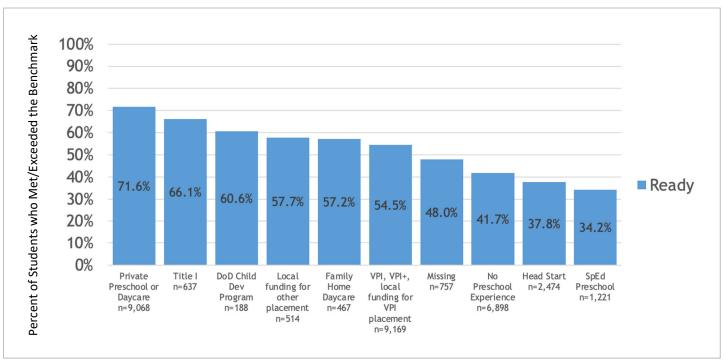
There are many factors that determine what type of early childhood education young children experience before starting kindergarten, many of which are related to family resources, availability and access to different types of ECE experiences, and parent choice. Children are not randomly sorted into different types of preschool experiences. Therefore, correlations between type of preschool experience and readiness estimates may be due to selection bias. Enrollment in different types of early learning experiences (private preschool, Department of Defense, etc.) appears to be correlated with whether students meet or do not meet the benchmark upon kindergarten entry (fall) and at the end of the school year (spring). These data presented in Figure 5.

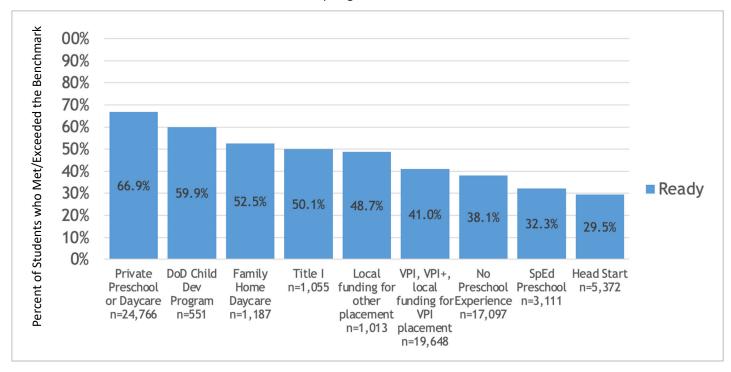
Figure 5
Fall 2019, Fall 2020 and Spring 2021 Readiness (Percent of Students who Met/Exceeded Benchmarks) by Students'
Preschool Experience

Fall 2019



Fall 2020

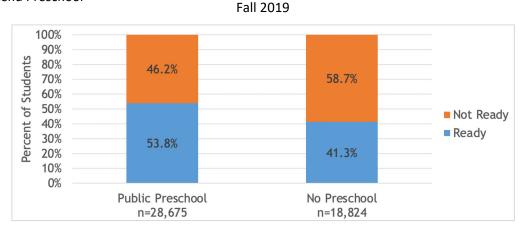




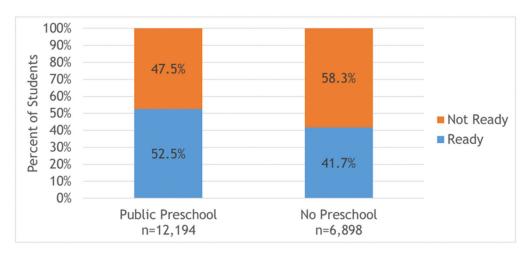
Children with Public Preschool Experience in Relation to Those Who Did Not Attend Preschool

For this breakdown, Public Preschool was defined as any preschool program operating within the public school. This would include VPI, VPI+, Title I, ECSE, and Head Start programs – both in the public school and if the public school is the fiscal agent, and locally funded public preschool programs. "No preschool" was defined as any student whose parent reported that they had not had a formal classroom preschool experience. An example of this would be if the student was at home with a parent, family member, caregiver, nanny, etc. Students assessed in the fall and spring of 2020-2021 who attended public preschool were more likely to be categorized as meeting or exceeding the readiness benchmark (or "ready"), compared to students who did not attend any preschool (Figure 6). This finding was much more pronounced in the fall of 2020 than in the spring of 2021. In the fall of 2020, this pattern was true for the overall benchmark and for the separate learning domains *except* social skills. In the spring of 2021, this was true overall and for all domains *except* self-regulation and social skills. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H1).

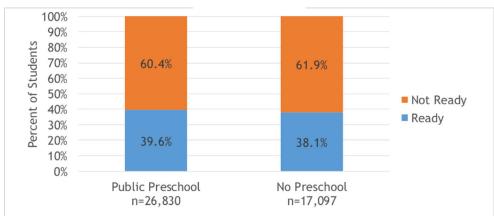
Figure 6Fall 2019, Fall 2020 and Spring 2021 Students' Overall Readiness for Those who attended Public Preschool and Those Who Did Not Attend Preschool











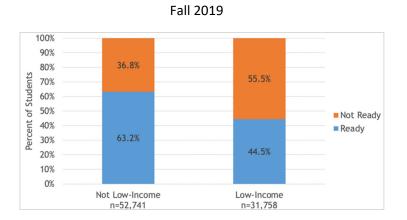
Children From Low-income Backgrounds

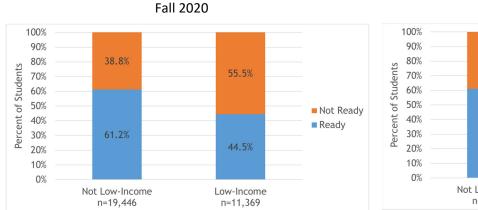
We examined students' readiness scores based upon whether they came from low-income backgrounds. We categorized students as coming from low-income backgrounds using the VDOE Disadvantaged Status Flag entered in the Student Record Collection. Detailed tables for the Student Record Collection (SRC) are included in Appendix B.

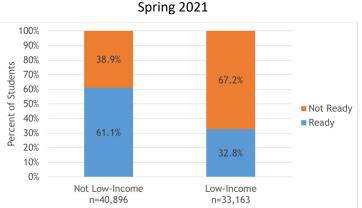
Students from low-income backgrounds assessed in the fall and spring of 2020-2021 were significantly more likely to be categorized as below benchmark (or "not ready"), compared to those coming from higher income backgrounds (Figure 7). Although both groups were more likely to be below the benchmark in the spring than they were in the fall, the change in proportion was more pronounced for children from low-income backgrounds (55.5% below benchmark in the fall, 67.2% in the spring). It is again important to note that the fall and spring samples cannot be directly compared because of shifts in the student population. As previously noted, the proportion of students from low-income families stayed level from fall 2019 to fall 2020. However, there was a 7.5% increase in the number of students from low-income backgrounds from the fall 2020 to spring 2021. This change is likely a result of the impact of COVID-19 and may be due to additional children enrolling in kindergarten after the start of the school year (there were more enrolled students in the spring compared to fall), shifts out of the public school system by some families, or real increases in the number of families experiencing low incomes.

Students from low-income backgrounds assessed in the 2020-2021 school year were also significantly more likely than students from higher income backgrounds to be categorized as below the benchmark in each of the four separate learning domains and in overall readiness. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H2).

Figure 7Fall 2019, Fall 2020, and Spring 2021 Students from Low-Income Backgrounds Related to Student Readiness







Note. Use caution when comparing data across years (see p.14 for explanation).

Public Preschool Experience for Students from Low-Income Backgrounds

There was a tremendous amount of variety in the preschool experiences, or lack thereof, for entering Virginia kindergarten students, and variability was associated with whether students came from low-income backgrounds (Table 4). While students from low-income backgrounds were less likely to meet the fall and spring benchmarks overall, students from low-income backgrounds who attended public preschool were more likely to meet or exceed the benchmark compared to students from similar backgrounds who did not attend public preschool (Figure 8). The public preschool advantage was larger in the fall of 2020 compared to the spring of 2021. In fall 2020 data, 17% more students who had attended public preschool met or exceeded the benchmark. In the spring, the difference between preschool attenders and non-attenders meeting or exceeding benchmarks was less than 5%.

The pattern in overall benchmark performance holds true across the literacy and mathematics domain assessments. The pattern does *not* hold for social skills and self-regulation. Students who did *not* attend public preschool were rated

slightly higher on social skills, and both groups were rated similarly on self-regulation. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H3).

Table 4Student Enrollment in Preschool Experience by Income Status (based on fall 2019 and fall 2020 Demographic Data)

Fall 2019

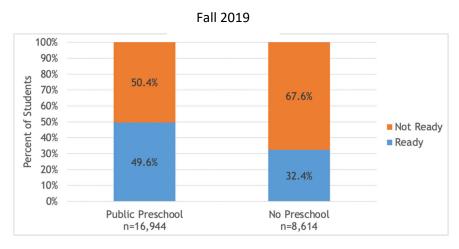
Preschool Experience Recoded				Total				
	Ν	lissing	Not Low	/-Income	Low-I	ncome		
	n	%	n	%	n	%	n	%
Head Start	0	0.0	1,820	3.2	4,711	13.4	6,531	7.0
VPI, VPI+, local funding for VPI placement	0	0.0	8,370	14.8	13,914	39.5	22,284	23.7
Special Education Preschool	0	0.0	3,150	5.6	1,771	5.0	4,921	5.2
Title I	0	0.0	735	1.3	551	1.6	1,286	1.4
Local funding for other placement	0	0.0	694	1.2	561	1.6	1,255	1.3
Private Preschool/Daycare	0	0.0	28,785	50.9	3,480	9.9	32,265	34.4
Dept. of Defense Child Dev. Prog.	0	0.0	583	1.0	65	0.2	658	0.7
Family Home Daycare	0	0.0	1,142	2.0	357	1.0	1,499	1.6
No Preschool Experience	0	0.0	11,283	19.9	9,775	27.8	21,058	22.4
Missing	2,157	100.0	0	0.0	0	0.0	2,157	2.3
Total	2,157	100.0	56,572	100.0	35,185	100.0	93,914	100.0

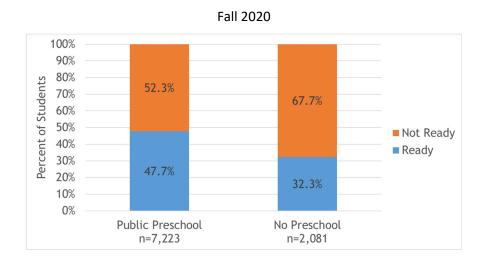
Fall 2020

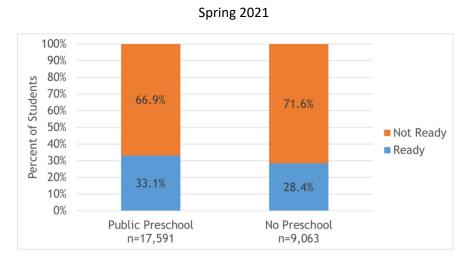
Preschool Experience Recoded		:		Total				
	ľ	Missing	Not Lov	w-Income	Low-	ncome		
	n	%	n	%	n	%	n	%
Head Start	0	0.0	1,880	3.7	3,833	12.5	5,713	6.8
VPI, VPI+, local funding for VPI	0	0.0	7,490	14.9	13,874	45.2	21,364	25.5
placement								
Special Education Preschool	0	0.0	2,827	5.6	1,819	5.9	4,646	5.5
Title I	0	0.0	579	1.2	547	1.8	1,126	1.3
Local funding for other placement	0	0.0	643	1.3	509	1.7	1,152	1.4
Private Preschool/Daycare	0	0.0	23,217	46.2	2,504	8.2	25,721	30.7
Dept. of Defense Child Dev. Prog.	0	0.0	524	1.0	36	0.1	560	0.7
Family Home Daycare	0	0.0	916	1.8	315	1.0	1,231	1.5
No Preschool Experience	0	0.0	11,954	23.8	7,227	23.6	19,181	22.9
Missing	2,863	100.0	258	0.5	16	0.1	3,137	3.7
Total	2,863	100.0	50,288	100.0	30,680	100.0	83,831	100.0

Note. Use caution when comparing data across years (see p.14 for explanation).

Figure 8Fall 2019, Fall 2020 and Spring 2021 Students from Low-Income Backgrounds Who Attend Public Preschool Related to Student Readiness





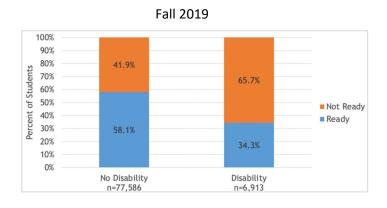


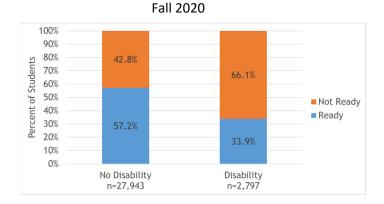
Note. Students with complete assessment, Disadvantage Status=Y, and preschool experience data were included. Use caution when comparing data across years (see p.14 for explanation).

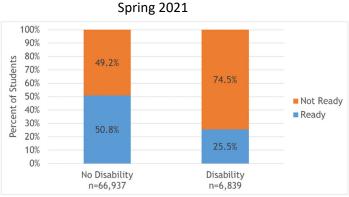
Students With Disabilities

Students with disabilities were more likely to be categorized as below the benchmark at both time points (Figure 9). In fall 2020, 66% of students with disabilities were categorized as below the benchmark, compared with 43% of students without disabilities. In spring 2021, 75% of students with disabilities were categorized as below the benchmark, compared to 49% students without a disability. This is true overall and in each of the four separate learning areas in both the fall and the spring. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H4).

Figure 9Fall 2019, Fall 2020 and Spring 2021 Overall Readiness for Students with Disabilities







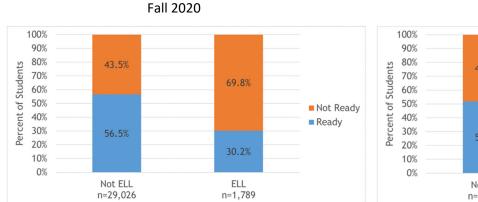
Note. Use caution when comparing data across years (see p.14 for explanation).

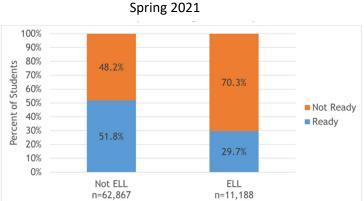
English Language Learners

Students identified as English language learners (ELL) were more likely than monolingual English speakers to be categorized as below the benchmark in both fall 2020 and spring 2021 (Figure 10). At both time points, about 70% of ELLs were below the benchmark. In the fall of 2020, this was true overall and in each of the domains *except* social skills. In the spring, this was true overall and in each of the separate learning areas, to also include social skills. ELL and monolingual English speakers had very similar proportions above and below the benchmark. Of note, the spring 2021 student assessment population included a greater proportion of ELLs; therefore, the fall and spring data cannot be directly compared. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H5).

Figure 10Fall 2019, Fall 2020 and Spring 2021 Overall Readiness by English Language Learner Status







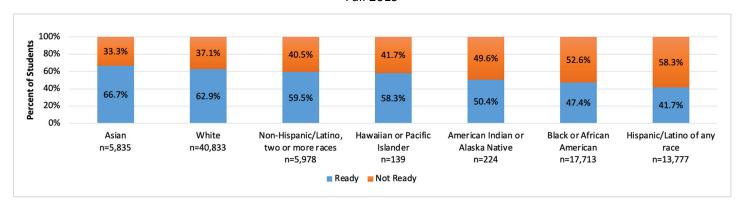
Racial and Ethnic Group

There was significant variability in the proportions of students performing above and below the benchmark across racial and ethnic groups at both timepoints (Figure 11). Hispanic/Latino of any race, Black or African American, and American Indian or Alaska native students were more likely to be categorized as falling below the benchmark at both timepoints compared to students from other racial groups. This pattern holds overall and for the four separate learning domains. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H6).

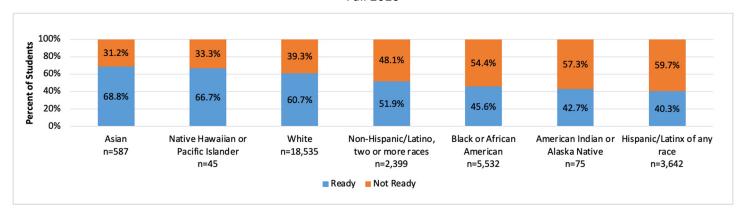
Of note, two of the largest racial and ethnic groups in the student sample, Black or African American and Hispanic/Latino of any race, appear to show the largest decreases in students meeting or exceeding the benchmark from fall to spring. These two groups also have increased representation in the spring 2021 student assessment population compared to fall 2020. It is possible and likely based on our data that students with the greatest sociodemographic barriers (and associated academic barriers) were less likely to be assessed in the fall of 2020, so fall 2020 data may have overestimated readiness of these groups. This clear shift in population underscores the importance of not directly comparing fall 2020 data to spring 2021 data.

Figure 11Fall 2019, Fall 2020, and Spring 2021 Overall Readiness by Race and Ethnicity

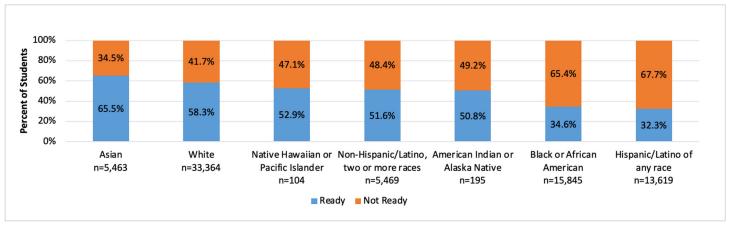
Fall 2019



Fall 2020



Spring 2021



Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

Table 5, on the following pages, shows how the overlap between student race/ethnicity and coming from a low-income background are jointly associated with proportions of students falling above and below the benchmark. For example, students who were Hispanic/Latino of any race, Black or African American, or American Indian or Alaska Native were

more likely to score below the benchmark if they came from a low-income background. These associations tended to be more pronounced in the spring of 2021.

Table 5 Fall 2019, Fall 2020 and Spring 2021 Readiness by Ethnicity and Low-Income Backgrounds

Fall 2019	Not low-Incom	ne	Low-Income				
Race/Ethnic Code	Overall Readiness	Total	Overall Readiness	To			

Race/Ethnic Code	٥١	Overall Rea		Readiness		Total		Overall Readine			To	otal
	Not R	eady	Rea	dy			Not R	leady	Rea	ady		
	n	%	n	%	n	%	n	%	n	%	n	%
American Indian or Alaska Native	1,311	29.4	3,147	70.6	4,458	100.0	633	46.0	744	54.0	1,377	100.0
Asian	30	32.3	63	67.7	93	100.0	28	60.9	18	39.1	46	100.0
Black or African American	10,139	32.6	20,924	67.4	31,063	100.0	4,990	51.1	4,780	48.9	9,770	100.0
Hispanic/Latino of any race	1,347	35.0	2,506	65.0	3,853	100.0	1,077	50.7	1,048	49.3	2,125	100.0
White	52	38.5	83	61.5	135	100.0	59	66.3	30	33.7	89	100.0
Native Hawaiian or Other Pacific Islander	3,537	48.4	3,772	51.6	7,309	100.0	5,782	55.6	4,622	44.4	10,404	100.0
Non-Hispanic/Latino, two or more races	2,983	51.2	2,847	48.8	5,830	100.0	5,051	63.6	2,896	36.4	7,947	100.0
Total	19,399	36.8	33,342	63.2	52,741	100.0	17,620	55.5	14,138	44.5	31,758	100.0

Fall 2020			Not lov	v-Inco	me		Low-Income					
Race/Ethnic Code	0'	Overall Re		l Readiness		Total		Overall Readiness				tal
	Not R	Not Ready		dy			Not R	eady	Rea	ıdy		
	n	%	n	%	n	%	n	%	n	%	n	%
American Indian or Alaska Native	19	52.8	17	47.2	36	100.0	24	61.5	15	38.5	39	100.0
Asian	107	25.7	309	74.3	416	100.0	76	44.4	95	55.6	171	100.0
Black or African American	1,295	49.9	1,302	50.1	2,597	100.0	1,716	58.5	1,219	41.5	2,935	100.0
Hispanic/Latino of any race	1,009	54.7	837	45.3	1,846	100.0	1,166	64.9	630	35.1	1,796	100.0
White	4,509	34.4	8,606	65.6	13,115	100.0	2,771	51.1	2,649	48.9	5,420	100.0

61.3 31

57.3 1,405

100.0 3

100.0 553

21.4 11

55.6 441

100.0 6,309 55.5 5,060 44.5 11,369

78.6 14

44.4 994

38.7 19

42.7 805

7,551 **38.8** 11,895 61.2 19,446

600

Native Hawaiian or Other Pacific Islander 12

Non-Hispanic/Latino, two or more races

Total

100.0

100.0

100.0

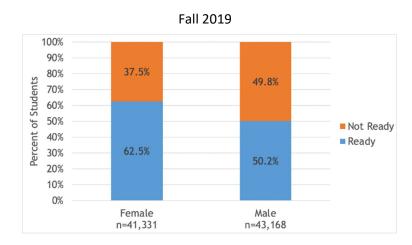
Spring 2021 Not low-Income Low-Income

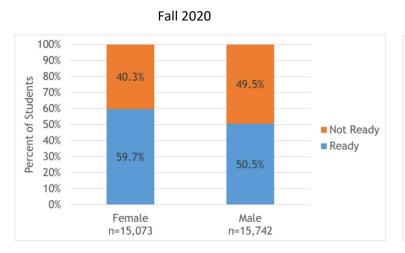
Race/Ethnic Code	O۱	verall I	Readines	SS	Total		Overall Readiness				. Total	
	Not R	Not Ready Ready					Not Ready		ıdy	dy		
	n	%	n	%	n	%	n	%	n	%	n	%
American Indian or Alaska Native	44	42.3	60	57.7	104	100.0	52	57.1	39	42.9	91	100.0
Asian	1,112	27.5	2,926	72.5	4,038	100.0	773	54.2	652	45.8	1,425	100.0
Black or African American	2,736	52.5	2,471	47.5	5,207	100.0	7,633	71.8	3,005	28.2	10,638	100.0
Hispanic/Latino of any race	2,866	56.6	2,201	43.4	5,067	100.0	6,352	74.3	2,200	25.7	8,552	100.0
White	7,950	34.1	15,331	65.9	23,281	100.0	5,956	59.1	4,127	40.9	10,083	100.0
Native Hawaiian or Other Pacific Islander	34	44.7	42	55.3	76	100.0	15	53.6	13	46.4	28	100.0
Non-Hispanic/Latino, two or more races	1,160	37.1	1,963	62.9	3,123	100.0	1,489	63.5	857	36.5	2,346	100.0
Total	15,902	38.9	24,994	61.1	40,896	100.0	22,270	67.2	10,893	32.8	33,163	100.0

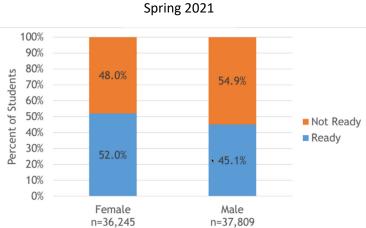
Sex/Gender

In both fall 2020 and spring 2021 data (Figure 12), male students were more likely to fall below the benchmark compared to female students. This was true for all domains *except for mathematics* in the spring of 2021. Detailed tables for fall 2019, fall 2020 and spring 2021 are included in Appendix H (Figure H7).

Figure 12Fall 2019, Fall 2020 and Spring 2021 Overall Readiness by Gender







Student Age

At both fall 2020 and spring 2021 timepoints, younger students were more likely to be categorized as not ready overall and in each of the four learning areas compared with older students (Table 6). Correlations show small, positive associations between student age and scores on each of the domain assessments.

Table 6Fall 2019, Fall 2020, and Spring 2021 Areas of Readiness by Age

Fall 2019

Age in months on Sept 1, 2019	C	overall F	Readiness		Total	
	Not Re	Not Ready		Ready		
	n	%	N %		n	%
<= 62 months	13,598	52.1	12,514	47.9	26,112	100.0
63 - 65 months	8,641	43.3	11,297	56.7	19,938	100.0
66 - 68 months	7,960	40.0	11,959	60.0	19,919	100.0
69+ months	6,820	36.8	11,710	63.2	18,530	100.0
Total	37,019	43.8	47,480	56.2	84,499	100.0

					Corre	lation	s	
	Ν	Mean	SD	1	2	3	4	5
1. Age in months on Sept 1, 20	01984,499	65.01	4.04	1				
2. Literacy Score	74,153	57.87	25.54	.155*	1			
3. Math Score	85,878	20.69	7.48	.186*	.701*	1		
4. Self-Regulation Score	85,909	3.57	0.84	.122*	.397*	.448*	1	
5. Social Skills Score	85,909	4.14	0.71	.031*	.153*	.193*	.668	*1

Fall 2020

Age in months on Sept. 1, 2020	C	verall F	Readiness		Tot	Total	
	Not Ready		Ready				
	n	%	N	%	n	%	
<= 62.32 months	4,173	53.8	3,586	46.2	7,759	100.0	
63.33 – 65.51 months	3,510	46.3	4,066	53.7	7,576	100.0	
65.52 – 68.63 months	3,265	42.6	4,398	57.4	7,663	100.0	
68.64+ months	2,912	37.3	4,905	62.7	7,817	100.0	
Total	13,860	45.0	16,955	55.0	30,815	100.0	

				(Correla	ations		_
	N	Mean	SD	1	2	3	4	5
1. Age in months on Sept 1, 2020	80,968	65.60	4.04	1				
2. PALS Summed Score	64,013	48.30	25.3 8	.152 *	1			
3. EMAS Scaled Score	33,359	591.07	70.6 3	.165 *	.667 *	1		
4. Self-Regulation Score	75,275	3.60	0.85	.087 *	.417 *	.466 *	1	
5. Social Skills Score	75,275	4.13	0.66	.035 *	.178 *	.227 *	.652 *	1

Spring 2021

Age in months on Sept. 1, 2020	C	verall R	Readiness		Tot	al
	Not Ready		Ready			
	n	%	N	%	n	%
<= 62.32 months	11,018	59.7	7,444	40.3	18,462	100.0
63.33 – 65.51 months	9,732	52.8	8,710	47.2	18,442	100.0
65.52 – 68.67 months	9,130	48.7	9,631	51.3	18,761	100.0
68.68+ months	8,292	45.1	10,102	54.9	18,394	100.0
Total	38,172	51.5	35,887	48.5	74,059	100.0

				(Correlo	ations	9	_
	Ν	Mean	SD	1	2	3	4	5
1. Age in months on Sept 1, 2020	74,059	65.61	3.94	1				
2. PALS Summed Score	65,077	80.56	19.6 4	.081	1			
3. EMAS Scaled Score	48,678	682.39	85.8 6	.130 *	.646 *	1		
4. Self-Regulation Score	74,632	3.82	0.84	.091 *	.500 *	.488 *	1	
5. Social Skills Score	74,632	4.41	0.59	.031 *	.239 *	.223 *	.620 *	1

^{*} Correlation is significant at the 0.01 level

Note. Use caution when comparing data across years (see p.14 for explanation).

Pre-Kindergarten VKRP 2020-2021 Results

Background

Continued Preschool VKRP Piloting

An equitable, culturally and linguistically sensitive, high-quality preschool experience supports young children to develop school readiness skills and helps prepare them for kindergarten. Since 2015 (the beginning of VKRP's statewide rollout), division and program leaders, principals, and teachers have repeatedly asked for early learning assessments that measure preschool children's growth over time. Longitudinal data allows preschool programs to examine their student school readiness data to determine progress toward meeting goals for student learning within the preschool year and across years over time to inform continuous improvement of the preschool experience (e.g., services are provided to support teacher-child interactions, professional development, curriculum). At the individual child level, that data can be used to better individualize instruction, experiences, and services to support a young child's learning and development.

In response to the desire for uniform, repeated assessments that measure a child's growth in learning from the beginning of preschool and extend across prekindergarten and kindergarten classrooms, the team began an extension of the VKRP assessment system to be used in preschool classrooms that would measure student growth in the four domain areas: literacy (PALS), math, self-regulation, and social skills. Beginning in 2017-2018 (with internal funding from the University of Virginia), the VKRP team developed and piloted new items for prekindergarten students. Further development and piloting of the preschool extension of the VKRP assessments (math, social skills, and self-regulation) and accompanying system (online platform, reports, instructional resources) was supported through funding from the Virginia Department of Social Services (VDSS) and private funders (The Obici Healthcare Foundation in Western Tidewater and the Alleghany Foundation in the Alleghany Highlands) from 2018 to 2020. During the 2020-21 school year, funding for the continued piloting of the preschool extension of VKRP came from private funders (The Obici Healthcare Foundation and the Alleghany Foundation) and federal Governor's Emergency Education Relief (GEER) funds. GEER funding allowed the VKRP team to provide support for interested Virginia Preschool Initiative (VPI) divisions to voluntarily use the VKRP preschool system to assess their students' self-regulation skills, social skills, and well-being using the CBRS. This was done to help better understand the impact of COVID-19 on preschool children's socialemotional functioning and mental health and well-being. During each year of the pilot, the number of participating classrooms has increased as more pre-kindergarten classrooms found value in the VKRP measures.

Communication of Kindergarten VKRP to the Preschool Community

CASTL developed a series of resources to communicate with parents of pre-k and pre-k teachers about school readiness and how VKRP measures and supports school readiness skills. These resources include short videos about early math, self-regulation, and social skills, a set of slides that can be adapted, and instructional resources for both preschool teachers and parents to support children's skill development. This spring, the toolkit of pre-k instructional resources became available to divisions across the Commonwealth. Additionally, the VKRP team led several in-person presentations with pre-k teachers and parents to discuss the importance of school readiness and how VKRP measures and supports readiness. Pre-k teachers were given access to view the VKRP training modules to understand the assessments.

2020-2021 VKRP Prekindergarten Pilot Data

In the fall of 2020 (Table 7), 353 classrooms within 139 programs voluntarily participated in the pilot program and assessed 4,101 children (274 of the classrooms completed only CBRS measures). In the spring of 2021, 360 classrooms within 142 programs voluntarily participated and assessed 4,177 children; 254 classrooms completed only the CBRS. The data on the following pages are not representative of Virginia's preschool population and are presented as preliminary, descriptive information only.

Table 7Fall 2020 and Spring 2021 Participation Data in Pre-K VKRP

	Fall 2	020	Spring 2021		
	Assessments Completed	Assessed Remotely	Assessments Completed	Assessed Remotely	
PALS Literacy	3,497	1,618	3,954	936	
EMAS Mathematics	689	Not Available	1,095	124	
CBRS Self-Regulation and Social Skills	4,077	N/A	4,157	N/A	

Pre-K VKRP Child Demographic Information

In fall 2020 (Table 8), 665 children had complete data on the VKRP assessments (mathematics, self-regulation, and social skills). In spring 2021, 1,075 children had complete data. The table below presents information about those children. Children enrolled in private or faith-based programs did not have demographic data available through the VDOE data system and are noted as missing data.

Table 8Fall 2020 and Spring 2021 Pre-K VKRP Child Sample Demographic Information

Age	In months on Sept 1	Fall 2020 n = 4,101 Mean (SD) or N (%) 53.3 (3.7)	Spring 2021 n = 4,177 Mean (SD) or N (%) 53.2 (3.7)
Gender	Male Female	1,816 (50.2%) 1,799 (49.8%)	1,893 (50.6%) 1,846 (49.4%)
Race/Ethnicity	American Indian or Alaskan Native Asian Black or African American Hispanic/Latino of any race White Native Hawaiian or Other Pacific Islander Non-Hispanic/Latino of any race, two or more races	10 (0.3%) 78 (2.2%) 1,440 (39.8%) 461 (12.8%) 1,345 (37.2%) 6 (0.2%) 275 (7.6%)	10 (0.3%) 82 (2.2%) 1,453 (38.9%) 493 (13.2%) 1,411 (37.7%) 5 (0.1%) 285 (7.6%)
Socioeconomic Status	Students from low-income backgrounds	2,334 (56.9%)	2,059 (49.3%)
Preschool Experience	Public Preschool	3,534 (86.2%)	3,732 (89.3%)
Disability Status	Students with a disability*	341 (9.4%)	464 (12.4%)
English Learner	ELL = Y	33 (0.9%)	96 (2.6%)

^{*}Includes speech or language impairments.

Note. All demographic data come from VDOE and use VDOE variable definitions. Use caution when comparing data across years (see p.14 for explanation).

Descriptive Data

We focus here on the domains that make up the VKRP assessment system — mathematics, self-regulation, and social skills, because these are the assessments that are new to Virginia pre-k programs. Information about PALS-PreK is available through the PALS Office.

For this pilot data, we present descriptive data on the measures that indicate variability in scores and relatively high internal consistency for both the fall and spring time points. In addition, the pre-k data show that the assessments have the potential to show growth.

Tables 9 and 10 provide descriptive statistics for the assessment subdomains and total scores. Table 9 table provides this information for the CBRS and the in-person EMAS in the fall of 2020 and spring of 2021; table 10 provides the same information for the shorter, remote version of the EMAS. The results indicate that the CBRS and the in-person EMAS have strong internal consistency (indicated by Cronbach's alphas (α) greater than .70) and include scores across a wide range, indicating the reliability and variability of these measures. The remote EMAS, with fewer items, showed lower internal consistency and a narrower range of scores. Due to concerns about the reliability of the remote EMAS subdomain scores, these scores were not shared with teachers, and teacher reports focused on the more reliable total and scaled scores.

When looking at average scores in the fall and spring, The pre-k assessments indicate that children tended to have lower scores at the start of the pre-k year and higher scores at the end of the year (Tables 9 and 10). Although the samples are not directly comparable to each other, it suggests that these assessments are sensitive to growth in four-year-olds.

Table 9Fall 2020 and Spring 2021 VKRP Pre-K Pilot Descriptive Statistics (EMAS in-person and CBRS)

Fall 2020

	N	Minimum	Maximum	Mean	Std.	α
					Deviation	
Geometry Subdomain Score	689	0	9	5.63	2.70	.820
Patterning Subdomain Score	689	0	6	2.81	2.17	.830
Numeracy Subdomain Score	689	0	16	8.70	4.92	.902
Computation Subdomain Score	689	0	2	1.24	0.85	.712
EMAS Total Score	689	0	33	18.37	9.36	.941
EMAS Scaled Score	689	250	758	522.83	100.46	-
CBRS Self-Regulation Score	4,071	1	5	3.33	0.82	.959
CBRS Social Skills Score	4,071	1	5	3.77	0.73	.852
CBRS Well-Being Score	4,071	1	5	4.01	0.66	.749

Spring 2021

	N	Minimum	Maximum	Mean	Std. Deviation	α
Geometry Subdomain Score	971	0	8	5.59	2.04	.707
Patterning Subdomain Score	971	0	4	2.33	1.45	.726
Numeracy Subdomain Score	971	0	18	10.48	4.69	.873
Computation Subdomain Score	971	0	5	3.16	1.71	.806
EMAS Total Score	971	0	35	21.56	8.61	.926
EMAS Scaled Score	971	296	817	638.02	80.56	-
CBRS Self-Regulation Score	4,157	1	5	3.75	0.82	.963
CBRS Social Skills Score	4,157	1	5	4.18	0.65	.863
CBRS Well-Being Score	4,157	1	5	4.33	0.61	.810

Note. Use caution when comparing data across years (see p.14 for explanation).

Table 10Spring 2021 VKRP 2021 Pre-K Remote EMAS Scores

Spring 2021

	N	Minimum	Maximum	Mean	Std.	α
					Deviation	
Geometry Subdomain Score (5 items)	124	0	5	3.68	1.18	.492
Patterning Subdomain Score (1 item)	124	0	1	0.62	0.49	-
Numeracy Subdomain Score (12 items)	124	0	12	7.65	3.04	.797
Computation Subdomain Score (2 items)	124	0	2	1.15	0.84	.598
EMAS Total Score (20 items)	124	0	20	13.10	4.54	.845
EMAS Scaled Score (20 items)	124	321	797	612.70	77.98	-

Note. Use caution when comparing data across years (see p.14 for explanation).

Next Steps

Virginia's youngest learners come to preschool and kindergarten having had many different experiences and exposure to early learning opportunities. This will be especially true for this coming year, as the global pandemic has led to disruption, stress, and in some cases, trauma, for our preschool and kindergarten learners. These large differences in children's learning experiences during the 2020-2021 school year will result in classrooms where the variation across students' skills will be wider (classrooms will be more heterogeneous than in the past with respect to children's academic and social-emotional skill development) compared to prior years. Students will need tailored academic and social-emotional support across the school year to engage in unfinished learning and to continue building new skills. In the 2021-22 school year, accelerating student progress while attending to students' social-emotional needs will require divisions and schools to be proactive in determining how to support teachers and meet each student's needs. Educators and administrators can use VKRP data in combination with other formative and summative assessments to help target

individualized instruction, determine teacher professional development needs, and, at the state level, inform policy decisions and help identify regions in need of the most support.

Continued Support for Kindergarten Implementation

VKRP will continue to support kindergarten teachers' implementation of VKRP by providing in-person and virtual trainings, resources, and information for teachers and school- and division-level administrators. For example, VKRP quickly developed and rolled out a remote version of the EMAS math assessment last spring, with accompanying online training modules to support teachers' use of the remote assessment. Based on teacher and administrator feedback, additional training and data use modules and resources are being developed to assist teachers and administrators in understanding how best to use VKRP data to support students' learning and development. Finally, VKRP is working with divisions to use their data to encourage collaboration between the kindergarten teacher and previous and/or future age/grade level teams to promote skill development over time for all students.

Collaboration with PALS on PALS Pre-K, PALS 2.0, and PALS en Español

VKRP is closely collaborating with PALS around the development and implementation of PALS-PreK, PALS 2.0, and PALS en Español. The teams regularly work together on assessment development, technology system development and expansion, data integration, teacher and administrator training, and data usage and reporting. Our technology and outreach and communication teams collaborate to provide users with a coherent PALS and VKRP experience that we are continuing to further enhance and strengthen as we work toward building an integrated data and user system (e.g., single user portal, integrated and streamlined reports, parallel user support systems).

Preschool Statewide Expansion in Classrooms Serving 4-year-olds

In 2021-2022, VKRP is expanding to be used within publicly funded, school-based, pre-k classrooms serving 4-year-olds. VKRP data in preschool will allow teachers to better understand the early foundational skills that young children are bringing to the classroom and will allow them to provide high-quality interactions and learning opportunities to support growth and development. VKRP is in the process of onboarding and training Virginia Preschool Initiative (VPI) classrooms. We are also closely collaborating with the Virginia Early Childhood Foundation (VECF) to provide tailored information and support to mixed delivery classrooms to support their implementation of VKRP during the 2021-2022 school year. In coordination with VDOE and Head Start, VKRP has invited Head Start classrooms to participate in VKRP during the 2021-2022 school year. We are collaborating with Head Start to ensure that VKRP meets all Head Start assessment requirements. The support for preschool teachers has been tailored to the needs of the early care and education workforce through high-quality training, just-in-time supports, access to data reports, and a suite of high-quality instructional resources. Additionally, VKRP is forming an advisory committee of preschool stakeholders to provide feedback on how VKRP can support teachers and administrators in their understanding and usage of VKRP data. With the statewide use of VKRP in publicly funded preschool classrooms, VKRP will be able to provide estimates of children's skills at the beginning and end of the preschool year, examine growth in skills across the preschool year, and measure growth across school years (age 4 through end of kindergarten).

Development and Piloting of VKRP for 3-year-olds

In collaboration with PALS colleagues, VKRP will develop a vertically aligned downward extension of VKRP that can be used for 3-year-olds. This downward extension will include item development, item piloting (~300 children for each new item), programming, data sharing with PALS and VDOE, incorporations of revisions of the literacy and language assessment scores, report development, and creation of new trainings.

Improved and Expanded Reports

VKRP is not just a set of assessments. It is also a reporting system that provides a detailed snapshot of students' skills in the fall and spring. These reports provide detailed, actionable information to help meet students' needs at their current skill levels and to give a snapshot of how students' skills have grown across the year. VKRP will be expanding reporting

capabilities to not only show students' growth across a single year, but to also provide information about students' skills across both preschool and kindergarten.

Additionally, VKRP added several well-being items to help teachers and administrators better identify and target students who may need additional supports for their well-being. We will improve well-being reports to more clearly "flag" students whose teachers express concern about them. We will provide links to resources that teachers can use to support students' metal health and well-being.

Additional Resources for Teachers and Families

Multiple resources about social-emotional wellness and additional resources specifically geared toward ELLs and students with disabilities are being added to both the VKRP assessment system and to the public VKRP website. Also, VKRP continues to guide families and schools about the administration of the VKRP in Virginia and how it should be used in conjunction with other sources of data to make student recommendations.

Conclusion

Virginia's kindergarten teachers, students (and their families), and school and division administrators faced significant challenges this year resulting from COVID-19. Despite these challenges, teachers conducted VKRP/PALS assessments in the fall of 2020 and the spring of 2021 using either in-person or remote modalities. These efforts have resulted in Virginia having valuable data to help us understand students' school readiness skills during the 2020-21 school year. This was the first year that VKRP was implemented statewide in the fall and spring. In the fall of 2020, 45% of kindergarteners were not meeting minimum expectations in one or more areas of learning. The results from the spring assessment time point indicate that more than half (52%) of Virginia's kindergarteners ended the school year still needing additional targeted support to build foundational skills in literacy, mathematics, self-regulation, and/or social skills.

Students falling below the benchmark at the beginning or end of kindergarten were disproportionately more likely to be students from low-income backgrounds, students with a disability, students who are English language learners, and students who are Black or African American, Hispanic/Latino of any race, American Indian or Alaska Native, or students of two or more races. These patterns point to systemic disparities in opportunities and educational experiences available to students and their families, and they elevate the concern that disparities were likely exacerbated during the 2020-2021 school year.

For children who come from low-income backgrounds, those children who participated in public preschool were more likely to arrive to kindergarten demonstrating readiness skills (48% ready) compared to those who were reported to not attend any preschool (32% ready). This trend was still present but diminished when looking at the associations between preschool experience and the spring VKRP data.

The VKRP team continued to develop and pilot the VKRP assessments to be used with preschool children in the 2020-21 school year. VPI and Mixed Delivery 4-year-old preschool programs will use VKRP in the fall and spring of the 2021-22 school year. In addition, the VKRP team will develop and pilot the assessment for use in 3-year-old and mixed age classrooms that receive public funding.

The VKRP team will continue to support divisions, schools, and teachers to complete the VKRP assessments in the 2021-22 academic year in close partnership with VDOE. VKRP will continue to analyze, interpret, and report the school readiness information gathered from VKRP both in kindergarten and in prekindergarten, and to provide informative and timely resources to assist teachers and administrators to support student learning.

Virginia's youngest learners come to preschool and kindergarten having had many different experiences and exposure to early learning opportunities. This is especially true for this coming year, as the global pandemic has led to disruption, stress, and in some cases, trauma, for our preschool and kindergarten learners. Large variations in children's learning experiences during the 2020-2021 school year will result in classrooms where the variation across students' skills will be wider compared to prior years. As a result, students will need tailored academic and social-emotional support across the school year to engage in unfinished learning and to continue building new skills. This coming school year, accelerating student progress while attending to students' social-emotional needs will require divisions and schools to be proactive in determining how they can support teachers and meet each student's needs. VKRP data, in combination with other formative and summative assessments, can be used to help divisions target individualized instruction, determine teacher professional development needs, and, at the state level, inform policy decisions and help identify regions in need of the most support.

Appendices

Appendix A. Division Participation and 2020-2021 Readiness Estimates

Fall 2020-2021

	Total	%			% Read	y		Englis	h-learner stu	ıdents ^a	Studer	nts with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	dentsd
Division	Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall		% Complete Assessment	% Ready Overall		% Complete Assessment	% Ready Overall
Accomack County Public Schools	319	82%	54%	69%	85%	86%	44%	69	93%	23%	36	72%	35%	69	77%	43%	161	83%	50%
Albemarle County Public Schools	859	0%	80%	100%	88%	73%	0%	93	-	-	80	-	-	234	-	-	537	0%	0%
Alexandria City Public Schools	1263	0%	72%	-	83%	66%	-	556	-	-	83	-	-	616	-	-	470	-	-
Alleghany County Public Schools	148	83%	66%	78%	95%	98%	61%	0	-	-	14	93%	46%	66	71%	62%	71	94%	64%
Amelia County Public Schools	115	94%	75%	75%	83%	88%	59%	4	100%	50%	18	94%	47%	37	92%	59%	66	95%	63%
Amherst County Public Schools	311	70%	77%	80%	82%	90%	64%	3	67%	0%	32	63%	40%	98	70%	54%	191	70%	71%
Appomattox County Public Schools	153	92%	77%	68%	86%	75%	53%	1	100%	0%	19	79%	20%	78	88%	36%	69	97%	70%
Arlington County Public Schools	1960	0%	86%	100%	84%	64%	67%	718	-	-	178	-	-	426	-	-	1034	0%	67%
Augusta County Public Schools	688	95%	69%	77%	82%	80%	53%	6	83%	20%	27	89%	4%	248	92%	36%	414	98%	64%
Bath County Public Schools	41	95%	68%	88%	85%	90%	62%	0	-	-	3	67%	50%	30	97%	59%	9	100%	67%
Bedford County Public Schools	617	88%	68%	80%	91%	89%	58%	12	100%	67%	56	84%	26%	248	86%	40%	326	92%	72%
Bland County Public Schools	56	98%	71%	93%	89%	96%	67%	0	-	-	3	100%	67%	20	95%	63%	35	100%	71%
Botetourt County Public Schools	318	93%	75%	91%	86%	89%	63%	10	90%	44%	34	85%	34%	111	91%	50%	191	97%	71%
Bristol City Public Schools	164	87%	66%	56%	81%	84%	43%	2	100%	0%	33	85%	29%	69	83%	46%	78	94%	48%
Brunswick County Public Schools	96	28%	45%	65%	71%	50%	26%	2		1	5	20%	0%	74	27%	10%	17	41%	71%
Buchanan County Public Schools	154	97%	75%	91%	81%	84%	59%	1	100%	100%	10	90%	89%	2	100%	50%	137	99%	57%
Buckingham County Public Schools	121	96%	73%	82%	91%	74%	53%	1	100%	100%	14	86%	25%	17	100%	41%	95	97%	57%
Buena Vista City Public Schools	82	51%	84%	86%	85%	89%	67%	0	-	-	19	47%	44%	42	40%	53%	33	64%	76%
Campbell County Public Schools	563	66%	82%	80%	59%	59%	58%	20	65%	46%	59	71%	36%	270	63%	52%	248	67%	68%
Caroline County Public Schools	319	85%	76%	75%	86%	48%	32%	7	43%	0%	26	65%	35%	97	76%	35%	201	91%	31%
Carroll County Public Schools	240	78%	65%	81%	85%	93%	53%	14	93%	77%	43	84%	25%	161	76%	44%	61	84%	80%
Charles City County Public Schools	35	37%	81%	65%	79%	26%	15%	0	-	-	3	-	-	20	30%	0%	13	46%	33%
Charlotte County Public Schools	115	84%	76%	81%	90%	93%	65%	0	-	-	10	70%	71%	55	78%	67%	57	89%	67%
Charlottesville City Public Schools	305	17%	74%	79%	84%	76%	59%	46	15%	43%	23	9%	50%	143	13%	42%	143	20%	69%
Chesapeake City Public Schools	2389	62%	86%	80%	81%	85%	61%	73	70%	27%	263	68%	41%	375	54%	49%	1682	63%	67%
Chesterfield County Public Schools	3735	12%	78%	77%	86%	86%	58%	421	13%	29%	326	11%	34%	1317	15%	50%	2004	11%	70%

	T. 4 1	%		(% Read	y		Englis	h-learner stu	udents ^a	Studer	its with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	ıdents ^d
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall
Clarke County Public Schools	100	71%	59%	78%	92%	98%	56%	7	71%	40%	10	60%	17%	24	67%	31%	65	77%	68%
Colonial Beach Public Schools	47	32%	83%	82%	80%	96%	73%	0	-	-	8	13%	0%	20	20%	75%	23	43%	80%
Colonial Heights City Public Schools	204	89%	54%	61%	79%	80%	40%	23	91%	43%	23	61%	43%	120	90%	37%	69	93%	48%
Covington City Public Schools	78	17%	51%	69%	92%	97%	69%	0	-	-	8	13%	0%	0	-	-	62	18%	73%
Craig County Public Schools	35	71%	58%	79%	78%	67%	56%	0	-	-	5	60%	0%	12	58%	0%	22	82%	78%
Culpeper County Public Schools	504	49%	60%	67%	86%	77%	48%	85	36%	19%	54	44%	42%	243	43%	35%	200	60%	61%
Cumberland County Public Schools	76	97%	80%	78%	93%	76%	57%	0	-	-	7	100%	43%	42	95%	53%	26	100%	65%
Danville City Public Schools	388	86%	58%	61%	77%	78%	40%	25	92%	39%	25	80%	25%	128	90%	47%	215	87%	37%
Dickenson County Public Schools	133	70%	69%	87%	91%	83%	66%	0	-	-	16	63%	60%	58	62%	75%	66	82%	61%
Dinwiddie County Public Schools	281	97%	54%	75%	86%	86%	42%	10	100%	30%	13	92%	25%	155	96%	36%	119	98%	50%
Essex County Public Schools	73	93%	54%	75%	86%	86%	47%	1	100%	0%	3	100%	0%	27	93%	56%	35	94%	48%
Fairfax County Public Schools	10952	0%	82%	0%	81%	69%	0%	4703	-	-	1068	-	-	3265	-	-	4808	0%	0%
Falls Church City Public Schools	132	0%	92%	-	-	-	-	16	-	-	10	-	-	11	-	-	100	-	-
Fauquier County Public Schools	647	73%	73%	82%	85%	71%	53%	69	55%	24%	50	56%	39%	180	63%	32%	399	82%	61%
Floyd County Public Schools	120	85%	70%	89%	82%	86%	58%	3	100%	0%	13	92%	42%	52	79%	41%	59	88%	73%
Fluvanna County Public Schools	160	52%	61%	85%	84%	85%	47%	7	71%	20%	25	60%	33%	69	48%	27%	65	55%	69%
Franklin City Public Schools	63	27%	84%	94%	84%	92%	71%	1	-	-	4	-	-	41	27%	73%	19	26%	80%
Franklin County	419	92%	69%	89%	89%	91%	61%	10	100%	20%	50	92%	41%	210	93%	51%	183	93%	73%
Frederick County Public Schools	927	89%	71%	77%	86%	90%	55%	64	84%	15%	52	75%	38%	359	90%	37%	499	92%	69%
Fredericksburg City Public Schools	264	91%	61%	65%	90%	77%	43%	45	96%	21%	31	74%	22%	220	90%	43%	20	100%	60%
Galax City Public Schools	85	98%	82%	57%	80%	87%	51%	16	100%	31%	10	90%	0%	54	100%	39%	23	100%	87%
Giles County Public Schools	140	96%	67%	74%	89%	75%	45%	0	-	-	11	100%	18%	68	97%	39%	65	97%	52%
Gloucester County Public Schools	345	93%	66%	76%	89%	90%	59%	0	-	-	30	87%	19%	54	85%	48%	265	97%	64%
Goochland County Public Schools	144	68%	91%	97%	94%	92%	80%	3	33%	0%	14	71%	70%	31	58%	72%	101	73%	82%
Grayson County Public Schools	93	98%	59%	70%	79%	89%	54%	2	-	-	12	100%	42%	28	100%	50%	60	100%	55%
Greene County Public Schools	178	74%	74%	84%	81%	89%	60%	8	63%	20%	22	50%	18%	85	71%	48%	79	80%	70%
Greensville County Public Schools	126	0%	58%	100%	81%	71%	-	13	-	-	11	-	-	85	i	-	26	-	-
Halifax County Public Schools	353	10%	78%	84%	87%	95%	74%	5	-	-	52	10%	60%	156	9%	57%	174	11%	85%
Hampton City Public Schools	1264	0%	76%	67%	77%	48%	33%	25	-	-	85	1%	0%	432	0%	0%	749	0%	100%
Hanover County Public Schools	964	70%	89%	88%	84%	87%	68%	35	69%	42%	123	72%	34%	220	64%	56%	632	74%	75%
Harrisonburg City Public Schools	500	8%	52%	49%	89%	79%	18%	268	10%	7%	55	13%	14%	287	8%	13%	107	6%	50%
Henrico County Public Schools	3146	0%	77%	-	84%	75%	-	342	-	-	248	-	-	1502	-	-	1372	-	-
Henry County Public Schools	403	76%	74%	78%	85%	79%	56%	36	81%	52%	31	77%	38%	283	75%	48%	103	83%	76%
Highland County Public Schools	15	93%	86%	100%	93%	86%	71%	0	-	-	1	100%	100%	11	91%	80%	3	100%	33%

	Total	%		•	% Read	y		Englis	h-learner stu	ıdents ^a	Stude	nts with a dis	sability ^b		nts from low-i backgrounds		Non-	identified stu	dentsd
Division	Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall
Hopewell City Public Schools	295	89%	68%	65%	83%	80%	48%	10	70%	14%	27	96%	42%	141	90%	46%	122	89%	51%
Isle of Wight County Public Schools	304	85%	77%	85%	83%	92%	66%	5	80%	100%	19	79%	27%	99	80%	48%	184	89%	76%
King and Queen County Public Schools	42	38%	75%	78%	92%	97%	81%	0	-	-	5	20%	100%	26	35%	78%	13	46%	83%
King George County Public Schools	262	94%	60%	78%	83%	65%	38%	2	50%	0%	28	89%	32%	54	87%	21%	182	97%	41%
King William County Public Schools	131	95%	67%	71%	90%	84%	53%	4	75%	0%	11	73%	38%	51	92%	43%	70	100%	63%
Lancaster County Public Schools	s 69	0%	83%	-	-	-	-	1	-	-	8	-	-	42	-	-	22	-	-
Lee County Public Schools	212	87%	50%	70%	90%	84%	38%	0	-	-	32	88%	18%	64	84%	33%	128	89%	42%
Lexington City Public Schools	43	93%	88%	85%	90%	83%	78%	7	86%	17%	3	67%	50%	13	92%	50%	24	100%	96%
Loudoun County Public Schools	4797	6%	83%	91%	86%	82%	75%	1470	2%	45%	294	5%	64%	1055	3%	50%	2740	7%	83%
Louisa County Public Schools	339	88%	69%	81%	86%	92%	57%	22	95%	62%	23	96%	64%	180	89%	48%	134	93%	68%
Lunenburg County Public Schools	117	95%	61%	63%	93%	50%	24%	20	100%	0%	13	100%	31%	62	97%	18%	42	90%	39%
Lynchburg City Public Schools	549	58%	68%	76%	88%	85%	56%	18	83%	20%	76	53%	38%	356	58%	48%	144	63%	79%
Madison County Public Schools	113	81%	69%	81%	85%	87%	56%	1	100%	0%	1	-	-	51	76%	44%	59	85%	68%
Manassas City Public Schools	556	0%	53%	-	75%	71%	-	284	-	-	34	-	-	295	-	-	147	-	-
Manassas Park City Public Schools	248	0%	47%	0%	78%	39%	1	149	-	ı	23	-	-	91	-	-	57	-	-
Martinsville City Public Schools	139	0%	66%	-	54%	47%	-	11	-	-	13	-	-	107	-	-	23	-	-
Mathews County Public Schools	59	92%	54%	89%	93%	96%	50%	0	-	-	11	91%	50%	17	71%	33%	34	100%	53%
Mecklenburg County Public Schools	293	69%	75%	74%	88%	77%	51%	3	100%	0%	22	68%	47%	144	67%	44%	133	72%	58%
Middlesex County Public Schools	84	86%	52%	76%	86%	83%	49%	1	100%	100%	7	71%	20%	11	100%	55%	68	87%	49%
Montgomery County Public Schools	683	87%	79%	82%	87%	86%	65%	47	96%	64%	59	73%	56%	296	85%	50%	316	91%	81%
Nelson County Public Schools	91	86%	56%	73%	73%	65%	36%	7	71%	20%	14	86%	17%	34	88%	30%	44	89%	41%
New Kent County Public Schools	171	1%	86%	100%	75%	42%	100%	0	-	-	23	4%	100%	11	-	-	130	-	-
Newport News City Public Schools	1875	0%	75%	50%	78%	67%	0%	147	-	-	128	1%	0%	963	0%	0%	732	-	-
Norfolk City Public Schools	2099	70%	73%	74%	82%	66%	45%	141	64%	32%	149	62%	27%	1274	71%	41%	632	75%	56%
Northampton County Public Schools	82	59%	61%	59%	81%	88%	42%	18	89%	38%	5	20%	100%	55	56%	35%	25	60%	60%
Northumberland County Public Schools	69	90%	68%	78%	89%	77%	45%	1	100%	0%	5	80%	0%	36	83%	33%	30	97%	59%
Norton City Public Schools	60	0%	51%	-	85%	88%	-	0	-	-	3	-	-	41	-	-	17	-	-
Nottoway County Public Schools	s 121	96%	66%	60%	88%	49%	31%	10	90%	0%	12	83%	20%	73	97%	27%	39	97%	39%
Orange County Public Schools	323	86%	61%	83%	82%	89%	51%	19	89%	18%	27	81%	23%	77	84%	45%	216	88%	58%
Page County Public Schools	196	76%	71%	78%	86%	87%	64%	2	100%	50%	20	60%	50%	64	81%	67%	122	75%	62%
Patrick County Public Schools	150	89%	70%	71%	83%	87%	56%	1	100%	100%	30	93%	50%	88	88%	44%	47	91%	79%

	Total	%		•	% Read	y		Englis	h-learner stu	udentsa	Stude	nts with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	dentsd
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall
Petersburg City Public Schools	342	0%	78%	-	73%	77%	-	14	-	-	11	-	-	263	-	-	42	-	-
Pittsylvania County Public Schools	453	89%	72%	80%	89%	92%	62%	25	88%	32%	36	86%	35%	161	84%	55%	259	92%	67%
Poquoson City Public Schools	125	86%	83%	85%	89%	97%	72%	0	-	-	12	58%	29%	15	87%	31%	101	89%	79%
Portsmouth City Public Schools	896	78%	77%	82%	82%	69%	51%	6	33%	50%	36	72%	19%	350	79%	51%	486	81%	54%
Powhatan County Public Schools	269	90%	79%	90%	89%	93%	71%	1	100%	100%	20	85%	41%	52	87%	58%	198	93%	76%
Prince Edward County Public Schools	135	76%	63%	67%	80%	67%	36%	4	100%	25%	17	71%	42%	1	100%	100%	109	79%	35%
Prince George County Public Schools	455	55%	74%	85%	88%	81%	59%	10	40%	25%	39	69%	56%	182	50%	44%	243	59%	67%
Prince William County Public Schools	5504	0%	65%	0%	88%	84%	0%	1739	0%	0%	416	-	-	2359	0%	0%	2368	-	-
Pulaski County Public Schools	270	76%	58%	80%	84%	88%	45%	4	50%	0%	32	84%	7%	120	70%	38%	125	83%	56%
Radford City Public Schools	103	95%	74%	76%	87%	91%	62%	0	-	-	8	50%	25%	40	95%	53%	56	100%	66%
Rappahannock County Public School	60	75%	42%	76%	80%	85%	38%	7	86%	17%	6	67%	25%	8	63%	0%	38	79%	47%
Richmond City Public Schools	1659	0%	59%	50%	74%	61%	25%	167	-	-	109	1%	0%	971	0%	25%	453	-	-
Richmond County Public Schools	92	83%	52%	78%	95%	99%	51%	10	100%	10%	5	60%	0%	43	74%	28%	45	91%	73%
Roanoke City Public Schools	1061	73%	59%	70%	83%	68%	39%	153	71%	24%	116	65%	24%	537	73%	31%	366	80%	52%
Roanoke County Public Schools	861	88%	82%	84%	81%	90%	67%	33	73%	42%	98	89%	43%	182	87%	48%	597	89%	74%
Rockbridge County Public Schools	142	92%	68%	78%	82%	91%	55%	2	100%	0%	14	86%	8%	32	84%	44%	100	95%	61%
Rockingham County Public Schools	776	80%	68%	81%	83%	77%	52%	120	74%	24%	59	63%	38%	323	75%	39%	389	88%	62%
Russell County Public Schools	256	76%	78%	87%	87%	93%	69%	2	100%	50%	31	71%	50%	133	70%	62%	110	84%	76%
Salem City Public Schools	238	85%	57%	75%	87%	91%	50%	14	86%	0%	34	65%	14%	50	80%	38%	167	90%	57%
Scott County Public Schools	216	79%	77%	88%	89%	90%	69%	0	1	-	25	72%	44%	215	79%	69%	-	-	ı
Shenandoah County Public Schools	350	93%	61%	65%	83%	79%	44%	46	85%	18%	43	88%	21%	183	91%	34%	139	98%	61%
Smyth County Public Schools	275	51%	69%	88%	75%	69%	47%	2	100%	0%	46	63%	41%	74	58%	33%	173	46%	53%
Southampton County Public Schools	166	69%	78%	88%	94%	94%	70%	1	100%	100%	8	25%	50%	75	64%	63%	87	74%	75%
Spotsylvania County Public Schools	1390	84%	66%	75%	79%	85%	51%	200	76%	28%	141	73%	23%	490	83%	38%	739	88%	62%
Stafford County Public Schools	1828	55%	77%	84%	86%	80%	57%	195	48%	32%	131	37%	31%	678	53%	43%	946	60%	69%
Staunton City Public Schools	171	44%	57%	57%	86%	71%	21%	13	62%	0%	11	36%	50%	32	38%	33%	121	45%	20%
Suffolk City	901	0%	79%	40%	80%	68%	50%	13	-	-	61	2%	0%	424	-	-	422	0%	100%
Surry County Public Schools	35	0%	88%	-	79%	85%	-	0	-	-	4	-	-	20	-	-	10	-	-
Sussex County Public Schools	65	0%	73%	-	71%	67%	-	0	-	-	7	-	-	22	-	-	38	-	-
Tazewell County Public Schools	412	95%	72%	77%	80%	92%	58%	0	-	-	47	81%	32%	233	94%	48%	161	98%	73%
Virginia Beach City Public Schools	4114	81%	76%	84%	81%	82%	60%	175	78%	50%	438	73%	35%	734	78%	55%	2829	85%	64%
Warren County Public Schools	337	83%	64%	76%	75%	72%	43%	11	91%	10%	28	89%	16%	68	85%	36%	237	85%	47%

	Total	%			% Ready	7		Englis	h-learner stu	ıdents ^a	Studer	its with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	ıdents ^d
Division		Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment			Camplete	% Ready Overall		% Complete Assessment			% Complete Assessment	•
Washington County Public Schools	417	89%	81%	86%	87%	84%	65%	4	100%	25%	47	83%	38%	241	88%	52%	158	91%	83%
Waynesboro City Public Schools	203	86%	45%	59%	79%	55%	28%	14	79%	36%	16	50%	25%	61	89%	26%	92	87%	35%
West Point Public Schools	58	83%	90%	96%	83%	85%	69%	1	100%	0%	7	71%	60%	22	82%	61%	30	87%	77%
Westmoreland County Public Schools	119	83%	80%	86%	92%	96%	70%	8	75%	67%	6	83%	40%	56	80%	69%	54	91%	71%
Williamsburg/James City Public Schools	674	91%	67%	75%	85%	78%	48%	51	96%	6%	101	83%	25%	279	89%	30%	323	96%	65%
Winchester City Public Schools	265	86%	56%	66%	87%	80%	42%	78	79%	19%	11	73%	38%	143	84%	37%	87	92%	56%
Wise County Public Schools	346	86%	74%	78%	75%	80%	54%	0	-	-	32	91%	34%	156	88%	50%	166	84%	61%
Wythe County Public Schools	262	87%	68%	76%	76%	69%	43%	0	-	-	46	85%	23%	150	85%	42%	97	89%	43%
York County Public Schools	741	87%	83%	87%	83%	86%	65%	38	87%	48%	58	79%	48%	201	80%	53%	458	92%	71%

Note.

^aSource: SRC LEP Status Code. Students are identified as ELL if code is Identified as EL and receives EL services, Identified as EL but has refused EL services, or Identified as formerly EL for each of the four years after exiting EL services.

^bSource: SRC Primary Disability Code. Students are identified as having a disability if any code is present except "Qualified Individual under Section 504".

cource: SRC (Student Record Collection) Disadvantaged Status Flag. Students are identified as economically disadvantaged if, at any point during the school year, the student: 1) is eligible for Free/Reduced Meals, 2) receives TANF, or 3) is eligible for Medicaid. In 2020-21 Free/Reduced Meals applications are not collected in schools participating in the Community Eligibility Program (CEP). Students in CEP schools are identified as economically disadvantaged based primarily on direct certification data. Students identified as eligible for Medicaid and students identified as experiencing Homelessness will continue to be identified. This information is outlined in Superintendent's Memo #104-14.

^dNon-identified students includes students grouped as: 1)not English-learners, 2)students without a disability, and 3)not from a low-income background.

Spring 2020-2021

	T-4-1	%		,	% Read	y		Englis	h-learner stu	udentsa	Studer	nts with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	ıdents ^d
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall		% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	
Accomack County Public Schools	319	93%	45%	46%	77%	83%	32%	82	99%	21%	38	82%	10%	74	82%	21%	156	96%	43%
Albemarle County Public	001	050/	(50/	710/	020/	020/	520/	00	020/	120/	100	020/	200/	221	000/	240/	400	000/	720/
Schools	891	95%	65%	71%	82%	83%	52%	99	93%	13%	100	82%	20%	331	90%	24%	490	98%	73%
Alexandria City Public Schools	1248	92%	55%	60%	73%	72%	39%	581	90%	23%	81	75%	21%	690	92%	23%	431	94%	67%
Alleghany County Public Schools	148	95%	53%	56%	79%	81%	37%	0	-	-	17	100%	12%	80	94%	29%	60	97%	47%
Amelia County Public Schools	118	95%	58%	42%	78%	79%	34%	5	100%	0%	18	100%	33%	48	96%	24%	60	93%	43%
Amherst County Public Schools	303	93%	65%	65%	68%	75%	44%	3	67%	0%	37	81%	20%	157	89%	40%	132	100%	48%
Appomattox County Public Schools	156	98%	66%	49%	74%	87%	42%	1	100%	0%	26	92%	17%	83	96%	26%	63	100%	62%
Arlington County Public Schools	1927	95%	76%	80%	77%	82%	60%	696	93%	42%	186	77%	36%	662	92%	39%	943	99%	77%
Augusta County Public Schools	702	97%	73%	70%	80%	82%	54%	20	95%	53%	42	95%	10%	308	96%	39%	359	98%	69%
Bath County Public Schools	43	95%	64%	77%	83%	71%	44%	0	-	-	5	80%	25%	32	97%	35%	10	100%	70%
Bedford County Public Schools	624	96%	76%	75%	83%	83%	57%	12	83%	70%	69	88%	30%	287	96%	41%	305	98%	74%
Bland County Public Schools	55	98%	70%	82%	89%	89%	61%	0	-	-	5	100%	60%	22	95%	52%	30	100%	70%
Botetourt County Public Schools	321	82%	76%	70%	82%	84%	54%	11	91%	20%	44	66%	21%	106	82%	34%	196	85%	66%
Bristol City Public Schools	160	93%	57%	62%	75%	85%	49%	2	100%	0%	29	83%	25%	66	91%	37%	79	97%	61%
Brunswick County Public Schools	94	91%	29%	47%	67%	75%	19%	3	100%	0%	5	80%	0%	74	91%	15%	18	94%	35%
Buchanan County Public Schools	157	81%	65%	82%	72%	77%	47%	1	100%	100%	13	100%	46%	2	100%	50%	138	79%	47%
Buckingham County Public Schools	120	98%	57%	60%	78%	86%	46%	3	100%	33%	16	81%	38%	17	100%	35%	91	100%	49%
Buena Vista City Public Schools	84	89%	84%	77%	70%	75%	52%	0	-	-	23	87%	25%	44	86%	37%	33	91%	73%
Campbell County Public Schools	574	79%	81%	80%	69%	75%	62%	23	78%	33%	62	82%	37%	289	78%	51%	244	77%	78%
Caroline County Public Schools	320	90%	54%	57%	69%	78%	37%	10	90%	0%	27	63%	6%	170	89%	26%	129	93%	54%
Carroll County Public Schools	249	87%	66%	77%	86%	88%	53%	16	94%	67%	50	86%	26%	183	87%	50%	56	91%	59%
Charles City County Public Schools	37	84%	33%	45%	75%	75%	26%	0	-	-	4	100%	25%	23	87%	15%	13	77%	50%
Charlotte County Public Schools	117	84%	58%	68%	81%	88%	50%	0	-	-	8	63%	60%	67	76%	35%	48	94%	69%
Charlottesville City Public Schools	299	93%	75%	67%	77%	86%	55%	49	88%	26%	29	79%	26%	164	88%	39%	122	98%	78%
Chesapeake City Public Schools	2447	99%	78%	71%	73%	82%	52%	114	96%	35%	312	93%	32%	1013	99%	36%	1180	100%	67%
Chesterfield County Public Schools	3815	94%	71%	64%	78%	80%	47%	526	93%	23%	384	84%	27%	1699	93%	32%	1770	96%	63%
Clarke County Public Schools	102	98%	74%	77%	92%	91%	61%	7	100%	43%	10	90%	22%	28	100%	25%	64	100%	80%
Colonial Beach Public Schools	47	87%	73%	67%	74%	96%	59%	0	-	-	11	82%	33%	19	79%	47%	22	91%	80%
Colonial Heights City Public Schools	205	94%	71%	56%	78%	75%	46%	23	96%	68%	25	60%	20%	139	92%	38%	60	100%	62%
Covington City Public Schools	76	87%	68%	60%	82%	92%	50%	0	-	-	13	92%	25%	0	-	-	56	86%	52%
Craig County Public Schools	32	94%	58%	83%	67%	63%	50%	0	-	-	6	83%	0%	19	95%	39%	12	92%	64%
Culpeper County Public Schools	514	87%	53%	52%	77%	80%	37%	94	81%	17%	69	78%	24%	271	85%	27%	181	93%	54%

	T-4-1	0%			% Ready	y		Englis	h-learner stu	ıdents ^a	Studer	nts with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	dentsd
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall		% Complete Assessment	% Ready Overall
Cumberland County Public Schools	78	94%	66%	51%	86%	88%	42%	0	-	-	9	89%	63%	42	93%	33%	28	96%	52%
Danville City Public Schools	402	87%	58%	62%	70%	79%	42%	19	84%	38%	31	77%	25%	137	86%	42%	236	88%	43%
Dickenson County Public Schools	144	94%	57%	71%	81%	89%	45%	0	-	-	16	94%	33%	62	95%	58%	74	95%	37%
Dinwiddie County Public Schools	285	100%	64%	58%	82%	82%	41%	10	90%	22%	4	100%	25%	150	99%	33%	134	100%	51%
Essex County Public Schools	75	99%	54%	41%	85%	91%	34%	2	100%	0%	3	67%	0%	28	96%	30%	38	100%	42%
Fairfax County Public Schools	11041	87%	81%	71%	74%	79%	53%	3224	73%	30%	1219	72%	30%	3843	78%	31%	5376	96%	69%
Falls Church City Public Schools	133	98%	80%	91%	85%	84%	67%	17	88%	13%	9	100%	56%	12	83%	20%	100	100%	78%
Fauquier County Public Schools	661	94%	63%	69%	78%	88%	48%	74	93%	26%	63	79%	18%	227	92%	31%	382	96%	61%
Floyd County Public Schools	119	97%	66%	76%	76%	76%	49%	3	100%	0%	16	81%	38%	51	94%	35%	57	100%	61%
Fluvanna County Public Schools	160	95%	55%	75%	83%	91%	49%	7	100%	43%	28	82%	26%	80	93%	31%	58	98%	75%
Franklin City Public Schools	60	93%	55%	60%	66%	76%	39%	1	100%	100%	3	33%	0%	34	91%	32%	24	96%	48%
Franklin County	437	96%	82%	79%	83%	86%	64%	11	100%	18%	80	95%	38%	228	96%	55%	173	96%	81%
Frederick County Public Schools	929	97%	74%	71%	81%	83%	52%	73	93%	26%	105	93%	34%	385	95%	41%	467	98%	63%
Fredericksburg City Public Schools	271	96%	45%	49%	74%	83%	29%	47	96%	11%	32	75%	17%	169	95%	19%	73	100%	53%
Galax City Public Schools	81	100%	74%	35%	74%	83%	30%	17	100%	18%	11	100%	0%	54	100%	20%	21	100%	57%
Giles County Public Schools	137	99%	79%	60%	72%	74%	41%	0	-	-	17	94%	6%	75	99%	34%	52	100%	58%
Gloucester County Public Schools	352	94%	68%	57%	84%	90%	48%	3	100%	0%	33	97%	22%	151	92%	35%	180	95%	61%
Goochland County Public Schools	152	97%	80%	64%	83%	87%	55%	5	100%	20%	15	93%	50%	36	94%	32%	101	99%	65%
Grayson County Public Schools	96	95%	68%	54%	78%	86%	47%	0	-	-	17	76%	31%	29	86%	44%	60	98%	51%
Greene County Public Schools	176	98%	79%	64%	71%	82%	44%	12	100%	33%	27	85%	26%	90	98%	39%	71	100%	55%
Greensville County Public Schools	123	82%	45%	38%	65%	73%	27%	13	85%	18%	18	83%	7%	88	82%	24%	29	86%	36%
Halifax County Public Schools	347	79%	45%	45%	77%	91%	32%	10	60%	0%	46	80%	8%	234	80%	23%	95	79%	57%
Hampton City Public Schools	1263	92%	63%	62%	74%	72%	38%	24	75%	39%	96	70%	9%	804	90%	30%	416	96%	52%
Hanover County Public Schools	973	99%	84%	81%	81%	87%	64%	37	97%	31%	150	94%	30%	283	98%	49%	585	100%	76%
Harrisonburg City Public Schools	505	97%	31%	30%	81%	82%	16%	278	96%	6%	60	82%	10%	294	97%	7%	106	100%	43%
Henrico County Public Schools	3178	75%	65%	67%	73%	81%	49%	371	70%	24%	342	68%	27%	1614	73%	31%	1275	80%	72%
Henry County Public Schools	409	95%	44%	52%	80%	89%	34%	39	100%	36%	39	87%	6%	291	93%	26%	100	100%	54%
Highland County Public Schools	14	100%	79%	100%	100%	93%	71%	0	-	1	4	100%	50%	10	100%	70%	1	100%	100%
Hopewell City Public Schools	288	91%	52%	47%	69%	81%	29%	11	55%	0%	32	94%	33%	141	91%	26%	132	92%	32%
Isle of Wight County Public Schools	313	94%	77%	69%	72%	86%	53%	6	100%	50%	29	97%	18%	133	92%	33%	158	96%	72%
King and Queen County Public Schools	42	83%	63%	73%	89%	100%	54%	0	-	-	7	100%	29%	25	88%	41%	15	73%	82%
King George County Public Schools	275	99%	67%	66%	85%	93%	55%	3	100%	0%	38	97%	43%	73	99%	32%	167	99%	66%

	Total	%		•	% Ready	y		Englis	h-learner stu	ıdents ^a	Stude	nts with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	ıdents ^d
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall		% Complete Assessment	% Ready Overall
King William County Public Schools	146	99%	76%	63%	82%	94%	54%	5	80%	0%	14	86%	25%	64	97%	39%	75	100%	69%
Lancaster County Public Schools	72	82%	26%	34%	83%	95%	22%	2	100%	50%	7	57%	0%	56	80%	20%	14	93%	31%
Lee County Public Schools	224	89%	52%	53%	88%	86%	38%	0	-	-	37	86%	13%	163	86%	36%	54	100%	46%
Lexington City Public Schools	44	98%	84%	84%	80%	77%	63%	6	100%	50%	2	100%	50%	14	100%	43%	26	96%	72%
Loudoun County Public Schools	4845	97%	76%	77%	81%	88%	60%	1525	95%	42%	315	86%	30%	1157	95%	31%	2708	99%	74%
Louisa County Public Schools	331	88%	79%	48%	85%	89%	38%	20	85%	18%	34	85%	24%	182	85%	25%	127	94%	57%
Lunenburg County Public Schools	112	100%	54%	38%	82%	86%	29%	21	100%	29%	14	100%	7%	77	100%	21%	29	100%	45%
Lynchburg City Public Schools	549	75%	60%	59%	79%	86%	45%	22	64%	14%	78	68%	13%	380	74%	35%	139	81%	75%
Madison County Public Schools	115	97%	61%	74%	78%	77%	47%	2	100%	0%	5	100%	0%	59	98%	29%	54	94%	69%
Manassas City Public Schools	566	94%	43%	38%	63%	80%	21%	305	95%	15%	35	86%	13%	334	95%	13%	136	96%	39%
Manassas Park City Public Schools	261	89%	24%	35%	65%	65%	10%	170	91%	8%	31	55%	12%	90	93%	12%	54	94%	12%
Martinsville City Public Schools	147	86%	38%	60%	57%	64%	28%	16	81%	23%	13	62%	0%	116	87%	26%	22	91%	45%
Mathews County Public Schools	61	98%	39%	64%	78%	83%	32%	0	-	1	14	93%	31%	27	96%	15%	27	100%	41%
Mecklenburg County Public Schools	290	84%	65%	57%	85%	92%	54%	4	100%	25%	24	79%	26%	191	79%	44%	91	97%	72%
Middlesex County Public Schools	88	93%	57%	61%	90%	94%	40%	1	100%	0%	15	93%	7%	55	91%	32%	25	96%	67%
Montgomery County Public Schools	680	97%	77%	78%	77%	85%	59%	50	100%	58%	59	69%	39%	310	96%	42%	306	100%	76%
Nelson County Public Schools	92	98%	59%	62%	69%	86%	43%	6	100%	33%	18	94%	12%	57	98%	32%	23	96%	91%
New Kent County Public Schools	168	99%	73%	69%	71%	75%	45%	0	-	-	25	100%	20%	11	100%	45%	136	99%	48%
Newport News City Public Schools	1875	96%	58%	56%	71%	80%	38%	168	92%	26%	135	84%	9%	1198	96%	31%	556	100%	55%
Norfolk City Public Schools	2079	86%	54%	51%	68%	79%	34%	155	84%	26%	198	75%	10%	1329	84%	26%	584	92%	55%
Northampton County Public Schools	84	94%	42%	44%	95%	95%	32%	14	100%	29%	6	100%	0%	59	95%	29%	22	91%	40%
Northumberland County Public Schools	71	89%	49%	52%	61%	64%	38%	1	100%	0%	6	67%	0%	37	78%	17%	33	100%	58%
Norton City Public Schools	55	0%	59%	-	87%	88%	-	0	-	-	6	-	-	34	-	-	18	-	-
Nottoway County Public Schools	118	98%	48%	52%	85%	86%	36%	9	100%	44%	14	86%	0%	73	99%	29%	35	100%	54%
Orange County Public Schools	327	94%	63%	65%	78%	89%	50%	20	100%	20%	38	84%	19%	147	92%	39%	150	97%	66%
Page County Public Schools	200	89%	75%	74%	84%	81%	56%	4	100%	50%	24	79%	21%	66	88%	53%	120	91%	60%
Patrick County Public Schools	151	97%	61%	58%	81%	87%	46%	1	100%	100%	37	92%	41%	93	96%	38%	45	100%	62%
Petersburg City Public Schools	338	97%	37%	55%	66%	84%	27%	17	71%	17%	13	92%	0%	287	98%	25%	41	100%	46%
Pittsylvania County Public Schools	458	97%	71%	62%	83%	91%	51%	26	96%	44%	50	94%	23%	155	95%	43%	266	97%	58%
Poquoson City Public Schools	145	98%	84%	76%	85%	87%	65%	0	-	-	13	85%	18%	36	100%	42%	100	100%	74%
Portsmouth City Public Schools	887	89%	44%	56%	70%	76%	31%	8	75%	0%	52	88%	20%	597	87%	24%	254	94%	50%
Powhatan County Public Schools	275	98%	84%	81%	90%	90%	69%	2	100%	100%	29	90%	46%	69	97%	52%	183	100%	78%

	T. 4 1	%			% Read	y		Englis	h-learner stu	ıdents ^a	Studer	nts with a dis	sability ^b		nts from low- backgrounds		Non-	-identified stu	ıdents ^d
Division	Total Students	Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	% Complete Assessment	% Ready Overall
Prince Edward County Public Schools	137	90%	41%	61%	65%	84%	33%	6	83%	80%	19	95%	6%	0	-	-	111	89%	36%
Prince George County Public Schools	467	90%	73%	68%	72%	78%	48%	8	88%	0%	55	87%	31%	217	88%	37%	220	92%	60%
Prince William County Public Schools	5652	97%	68%	67%	82%	89%	52%	1882	96%	35%	476	78%	35%	2608	96%	37%	2283	99%	72%
Pulaski County Public Schools	274	98%	64%	65%	80%	76%	46%	7	57%	25%	39	97%	26%	121	98%	35%	128	100%	59%
Radford City Public Schools	103	96%	67%	52%	76%	78%	45%	0	-	-	12	75%	11%	62	95%	32%	37	100%	70%
Rappahannock County Public School	61	97%	38%	37%	73%	78%	25%	6	100%	17%	8	100%	13%	27	96%	15%	27	96%	35%
Richmond City Public Schools	1737	93%	41%	50%	60%	61%	24%	292	94%	7%	140	82%	16%	1233	92%	19%	300	97%	53%
Richmond County Public Schools	93	88%	56%	67%	88%	94%	48%	10	90%	11%	10	100%	20%	49	84%	37%	39	92%	64%
Roanoke City Public Schools	1039	95%	54%	52%	73%	78%	34%	166	97%	27%	128	80%	17%	722	94%	27%	222	98%	59%
Roanoke County Public Schools	885	93%	79%	80%	79%	85%	60%	39	95%	43%	116	96%	32%	207	90%	44%	585	94%	69%
Rockbridge County Public Schools	138	98%	64%	70%	74%	85%	52%	2	100%	0%	15	87%	38%	78	96%	37%	54	100%	72%
Rockingham County Public Schools	774	98%	72%	71%	80%	77%	46%	124	96%	22%	68	84%	25%	355	97%	32%	366	100%	60%
Russell County Public Schools	256	92%	68%	73%	83%	91%	55%	2	100%	100%	33	88%	24%	131	90%	42%	114	94%	71%
Salem City Public Schools	244	92%	74%	69%	81%	81%	54%	15	80%	17%	42	79%	18%	115	90%	42%	109	96%	70%
Scott County Public Schools	221	96%	71%	71%	77%	88%	55%	0	-	-	37	89%	27%	210	97%	56%	9	100%	44%
Shenandoah County Public Schools	363	98%	65%	66%	74%	83%	43%	49	98%	25%	53	92%	22%	205	98%	36%	129	100%	58%
Smyth County Public Schools	281	97%	55%	60%	78%	86%	43%	2	100%	0%	55	98%	22%	170	97%	35%	97	97%	60%
Southampton County Public Schools	171	94%	62%	56%	78%	88%	44%	1	100%	100%	9	56%	0%	91	91%	30%	72	99%	58%
Spotsylvania County Public Schools	1400	96%	60%	55%	70%	83%	40%	220	94%	21%	176	78%	17%	668	95%	26%	596	100%	57%
Stafford County Public Schools	1833	95%	68%	62%	81%	87%	47%	232	88%	20%	162	70%	19%	795	92%	32%	886	99%	61%
Staunton City Public Schools	173	87%	66%	62%	84%	80%	43%	9	78%	0%	15	80%	17%	36	89%	41%	122	87%	48%
Suffolk City	896	96%	54%	61%	78%	76%	37%	15	100%	53%	67	79%	17%	393	93%	27%	446	99%	46%
Surry County Public Schools	32	97%	55%	84%	94%	100%	55%	0	-	-	3	67%	50%	19	95%	44%	10	100%	60%
Sussex County Public Schools	68	0%	28%	-	72%	76%	-	0	-	-	7	-	-	24	-	-	41	-	-
Tazewell County Public Schools	417	96%	54%	66%	78%	91%	47%	0	-	-	56	82%	24%	240	95%	38%	156	99%	62%
Virginia Beach City Public Schools	4079	98%	79%	76%	78%	84%	58%	169	98%	38%	460	88%	27%	1795	97%	46%	1932	100%	72%
Warren County Public Schools	337	95%	64%	54%	77%	83%	37%	12	100%	8%	36	86%	19%	176	97%	31%	144	95%	47%
Washington County Public Schools	414	92%	78%	63%	79%	85%	51%	3	100%	0%	55	91%	24%	241	92%	38%	151	91%	75%
Waynesboro City Public Schools	209	50%	68%	60%	81%	80%	40%	18	28%	20%	21	29%	17%	157	50%	33%	43	53%	61%
West Point Public Schools	61	92%	92%	79%	84%	86%	61%	1	100%	0%	9	78%	14%	24	92%	50%	30	93%	71%
Westmoreland County Public Schools	120	98%	59%	62%	83%	95%	45%	10	100%	40%	5	100%	20%	72	100%	36%	42	98%	63%

	Total	%			% Ready	7		Englis	h-learner stu	ıdents ^a	Studer	its with a dis	sability ^b		nts from low- backgrounds		Non-	identified stu	dentsd
Division		Complete Assessment	Literacy	Math	Self-Reg	Social Skills	Overall	Total Students	% Complete Assessment	% Ready Overall	Total Students	('amnlete	% Ready Overall		% Complete Assessment	Ready		% Complete Assessment	% Ready Overall
Williamsburg/James City Public Schools	653	97%	69%	64%	77%	83%	49%	52	98%	18%	108	85%	25%	297	96%	29%	303	100%	69%
Winchester City Public Schools	271	96%	67%	60%	76%	72%	37%	86	93%	24%	20	75%	13%	157	96%	34%	84	99%	49%
Wise County Public Schools	355	92%	69%	69%	74%	83%	54%	0	-	-	49	94%	26%	240	90%	45%	95	96%	78%
Wythe County Public Schools	259	90%	68%	68%	75%	83%	50%	1	100%	100%	56	84%	32%	162	88%	44%	77	92%	63%
York County Public Schools	766	91%	90%	83%	77%	84%	64%	42	93%	56%	72	83%	35%	199	87%	53%	472	94%	72%

Note.

^aSource: SRC LEP Status Code. Students are identified as ELL if code is Identified as EL and receives EL services, Identified as EL but has refused EL services, or Identified as formerly EL for each of the four years after exiting EL services.

bSource: SRC Primary Disability Code. Students are identified as having a disability if any code is present except "Qualified Individual under Section 504".

^cSource: SRC (Student Record Collection) Disadvantaged Status Flag. Students are identified as economically disadvantaged if, at any point during the school year, the student: 1) is eligible for Free/Reduced Meals, 2) receives TANF, or 3) is eligible for Medicaid. In 2020-21 Free/Reduced Meals applications are not collected in schools participating in the Community Eligibility Program (CEP). Students in CEP schools are identified as economically disadvantaged based primarily on direct certification data. Students identified as eligible for Medicaid and students identified as experiencing Homelessness will continue to be identified. This information is outlined in Superintendent's Memo #104-14.

^dNon-identified students includes students grouped as: 1)not English-learners, 2)students without a disability, and 3)not from a low-income background.

Appendix B. VDOE Codes

English Language Learners (ELL)						
Yes	If VODE EL Code is: 1) Identified as EL and receives EL services, 2) Identified as EL but has refused EL services, or 3) Identified as formerly EL for each of the two years after exiting EL services or 4) Identified as formerly EL for each of the four years after exiting EL services.					
No	If VDOE demographic data is present but EL Code is not present.					

Studen	Students With a Disability (SWD)					
Yes	If any VDOE Disability Code is present except "Qualified individual under Section 504"					
No	If VDOE demographic data is present but Disability Code is not present or if Disability Code is "Qualified individual under Section 504".					

Economically Disadvantaged Status						
Yes	If the student meets any one of the following: 1) is eligible for Free/Reduced Meals, or 2) receives TANF, or 3) is eligible for Medicaid, or 4) identified as either Migrant or experiencing Homelessness.					
No						

All public preschool students must be reported to the Student Record Collection (SRC) system when the school division is the fiscal agent, grantee, or sub-grantee. All public preschool students receive both a Preschool Funding Code and a Preschool Experience Code assigned by school divisions in the preschool year. Non-public preschoolers are not captured in the SRC system, and their Preschool Experience Code is parent-reported at kindergarten entry. If parent-reported preschool experience does not match the SRC system, the Preschool Experience Code will default to division records. This information comes from the Guidance for PK Funding and PK Experience Codes posted on the VPI website.²

Preschool Experience Code						
Head Start	The preschool classroom for at-risk four-year-olds is funded by the federal Head Start grant in a community-based organization.					
Public Preschool	A preschool program operated in the public school. This would include VPI, VPI+, Title I, ECSE, and Head Start programs – both in the public school and if the public school is the fiscal agent; and locally funded public preschool program.					
Private Preschool/Daycare	The student is served by a preschool, child daycare, or other program provided by a private provider. This includes programs for-profit and non-profit providers, including faith-based programs and commercial daycare centers.					
Department of Defense Child Development Program	A preschool program operated by the Department of Defense on a military installation.					

Family Home Daycare Provider	The student was served by a preschool or child daycare provided in a home.
No Preschool Experience	The student has not had a formal classroom preschool experience. The student was at home with a parent, family member, caregiver, nanny, etc.

Preschool Fund	ing Code
Head Start	Select Head Start as the funding source code if the student slot is fully funded with federal Head Start funds administered by the school division as the Head Start grantee.
Virginia Preschool Initiative (VPI)	Select VPI as the funding source code if the student slot is fully funded by the state Virginia Preschool Initiative.
VPI Plus (VPI+)	Select VPI+ as the funding source code if the student slot is fully funded by the federal Preschool Development Grant.
Special Education Preschool (Part B, 619)	Select Special Education Preschool as the funding source code if the student slot is fully funded with federal Special Education Preschool funds. This code may apply to students with Individualized Education Programs who receive special education and related services in a public special education early childhood classroom, regular early childhood program, or in a service-provider location (e.g., therapist's office). This code may also apply to students in a private community-based program if services are funded with federal Special Education Preschool funds. This funding code is not be used if the student slot is funded by Head Start, VPI, or VPI+.
Title I Preschool	Select Title I Preschool as the funding source code if the student slot is fully funded with federal Title I, Part A funds, not mixed with state or other funding sources. Ex. A student slot funded with VPI state funds in a classroom where the teaching assistant's salary is paid out of Title I funds would not be labeled with this funding code because the student slot is not fully funded by Title I. Instead, the slot would receive a #3 funding code as a VPI state funded slot.
Local Funding for VPI Placement	Select local funding for VPI student placement if VPI local match is used. This funding code is typically used when a school division has been allocated state VPI funds for less than a full classroom of 18 students. Ex. The division may be allocated 11 VPI funded slots. In order to maximize services for students, the school divisions places 7 more students in the room and provides local funds to account for the additional student slots. Seven students would be coded #8 in this scenario.
Local Funding for Other Public Preschool Program	Select local funding that supports any other public preschool program not identified in this list.

Note. Further documentation of these codes are available here:

http://www.doe.virginia.gov/statistics_reports/research_data/data_elements.shtml#disadvantage

https://docs.google.com/viewer?url=http%3A%2F%2Fwww.doe.virginia.gov%2Finfo_management%2Fdata_collection%2Fstudent_record_collection%2Fresources%2Fguidance-for-pk-funding-pk-experience-codes.docx

 $\underline{\text{http://www.doe.virginia.gov/info}} \ \ \underline{\text{management/data}} \ \ \underline{\text{collection/student}} \ \ \underline{\text{record}} \ \ \underline{\text{collection/code}} \ \ \underline{\text{values/index.sht}} \ \underline{\text{ml}}$

²Guidance for PK Funding and PK Experience Codes posted on the VPI website: http://www.doe.virginia.gov/early-childhood/preschool/vpi/index.shtml

Appendix C. VKRP History

The Virginia Kindergarten Readiness Program (VKRP) was originally conceived of and advocated for by Elevate Early Education (E3), a statewide issue advocacy group focused on early childhood education, as a way to define the state of readiness in Virginia and therefore, advocate for a stronger investment in high quality early childhood education in Virginia. Phase 1 (2013-14) consisted of piloting potential measures to be used as part of VKRP. In Phase 2 (2014-15), the goal was to provide an estimate of the readiness gap in Virginia using a small but representative sample of students. A battery of assessments was used to provide a more comprehensive estimate of readiness in the state, revealing a larger proportion of students who arrived at kindergarten without key readiness skills than had previously been estimated using the literacy data alone.ⁱ

VKRP chose a set of **coordinated assessments**. Literacy (leveraging the state adopted literacy assessment, PALS), mathematics, self-regulation, and social skills assessments were combined to provide teachers with a more comprehensive picture of students' readiness skills. This set of assessments places a purposeful and equal emphasis on children's academic (literacy and mathematics) and social-emotional (self-regulation and social skills) measures:

- The *Phonological Awareness Literacy Screening (PALS)* is the state adopted literacy assessment used from preschool through third grade and this data is pulled into the VKRP system to assess students' literacy skills. It is a teacher-administered direct assessment.
- The Early Mathematics Assessment System (EMAS) is a teacher-administered direct assessment used to assess students' mathematics skills.ⁱⁱ
- The *Child Behavior Rating Scale (CBRS)* is a teacher report measure used to assess students' self-regulation and social skills.ⁱⁱⁱ

In addition to establishing a statewide estimate of readiness in Virginia, the report to the Virginia General Assembly made several recommendations for the statewide roll-out of a more comprehensive readiness assessment system. This included building off of Virginia's state literacy assessment in order to provide teachers, administrators, and policymakers with a more streamlined experience and useful data across multiple readiness skills, providing comprehensive training and support to educators and leaders on how to administer the new assessments, interpret, and use the new data coming from VKRP, and providing instructional resources tied to the assessment data for teachers. In the next section, we provide a more detailed description of the VKRP assessment system and the individual measures.

Appendix D. VKRP Expansion over the years

From Voluntary to Statewide Implementation of VKRP (2014 to present)

From 2014 through 2018, CASTL implemented VKRP through a voluntary rollout where, each year, an increasing number of divisions elected to implement VKRP. During this pilot period, CASTL utilized an iterative design approach to regularly gather feedback from teachers, divisions, and VDOE, and used it to revise and improve the assessment system, online application, reports, and resources. For example, instructional strategies were linked directly to data reports for easy teacher access. In addition, teachers and division leaders repeatedly asked for a spring assessment to measure growth, which CASTL created. Thus, VKRP has been continually revised to improve the feasibility and utility of the data for kindergarten teachers, school and division administrators, and policymakers.

Based on preliminary data, statewide implementation of VKRP was a key recommendation made in the 2017 Joint Legislative Audit and Review Commission (JLARC) report, *Improving Virginia's Early Childhood Development Programs*. This allowed Virginia, for the first time, to have a comprehensive understanding of children's school readiness upon entering kindergarten. **Item 1** summarizes the uptake of VKRP.

Item 1. VKRP Expansion 2014-2019

Year	2014	2015	2016	2017	2018	2019
Total number of estimated classrooms	5,212	5,055	5,047	5,059	5,055	5,074
Total of VKRP classrooms	100	533	661	1,200	1,660	5,021
% of total	1.9	10.5	13.1	21.6	34.2	99*

Year	2014	2015	2016	2017	2018	2019
Total number of estimated students	93,807	90,991	90,850	91,053	91,002	92,407
Total of VKRP students	2,036	9,809	11,899	20,039	30,666	91,943
% of total	2.2	10.8	13.1	22.0	34.2	99*

Statewide Kindergarten Implementation

VKRP began statewide kindergarten implementation in the 2019-20 school year. 132 school divisions completed the VKRP assessments in the fall of the kindergarten school year. In the early fall of 2019, to prepare staff throughout Virginia, the VKRP team conducted 28 train-the-trainer workshops and 66 inperson division trainings. Due to the coronavirus pandemic, the spring window for VKRP was suspended and therefore, only fall 2019 data is reported.



In order to understand how experiences prior to kindergarten are linked to children's school readiness data, including how children's experience in the Virginia Preschool Initiative (VPI) connects to their kindergarten readiness, more data collection and data integration has been needed. Toward this end, all VPI programs are now participating in the Advancing Effective Interactions and Instruction (AEII) Initiative (Virginia Acts of Assembly - Chapter 854, Item 128, J-K [June 30, 2019]) which provided additional insights into the quality of teacher-child interactions in every VPI classroom this past year, as well as additional guidance in the use of comprehensive preschool curriculum and professional development. In 2019-2020 and in future years, these interactions and other data are being analyzed to have a better understanding of how the quality of children's preschool experience in VPI is connected to their readiness skills as assessed by VKRP.

Appendix E. Description of the VKRP Assessment System

In addition to being a **system of coordinated assessments**, VKRP is also a **reporting system** that provides detailed information about students' skills at the student, classroom, school, division, and state levels. It provides a snapshot of students' skills in the fall and spring as well as information about growth in students' skills across the year.

VKRP also provides **resources** that support teachers and administrators. In-person and online training modules were designed to enhance teachers' and administrators' understanding of the history of VKRP, how to administer assessments, and how to interpret reports and access instructional resources.

Teachers increasingly are expected to use data to inform their instruction. However, it is not always clear how to transform data into usable information. VKRP provides support in this process by linking results from the VKRP assessments to a set of instructional resources in the areas of mathematics, self-regulation, and social skills. Instructional resources include skills and strategy guides and instructional activities that teachers can use to support students' learning. The instructional resources were developed by researchers at CASTL with expertise in teacher-child interactions and in the development of children's mathematical, self-regulation, and social skills.

Prior to the COVID-19 pandemic, VKRP also offered in-person data use sessions for divisions and provided individualized scaffolding on how to interpret and use data provided in the VKRP reports. Together, the components of the VKRP assessment system are designed to provide detailed and actionable information to assist teachers, leaders, stakeholders, and other individuals at all levels (classroom, school, division, state) in delivering the support needed for student learning. The data can be shared with families to help connect classroom and home learning. In addition, VKRP helps school and division leaders better support teachers with targeted professional development and policymakers to make sound decisions about educational needs and funding across the Commonwealth.

Appendix F. Description of the VKRP Measures

The mathematics, self-regulation, and social skills screening measures were identified to be used to complement the state's literacy assessment, PALS. Below, we provide a detailed description of the measures used, in addition to PALS, that make up VKRP:

Phonological Awareness Literacy Screening (PALS)

PALS provides a comprehensive assessment of young children's knowledge of the important literacy fundamentals that are predictive of future reading success. PALS is the state-provided screening tool for Virginia's Early Intervention Reading Initiative (EIRI) and is used by 99% of school divisions in the state on a voluntary basis. PALS consists of three instruments, PALS-PreK (for preschool students), PALS-K (for kindergartners), and PALS 1-3 (for students in grades 1-3). PALS assessments are designed to identify students in need of additional reading instruction beyond that provided to typically developing readers. The PALS-K assessment measures rhyme awareness, beginning sound awareness, spelling, letter knowledge, letter sound knowledge, and concept of word. PALS informs teachers' instruction by providing them with explicit information about their students' knowledge of literacy fundamentals. Mid-year assessment and PALS Quick Checks allow for ongoing student progress monitoring throughout the year.

Early Mathematics Assessment System (EMAS)

The EMAS is a reliable and valid research-based assessment of early mathematical thinking that draws on modern cognitive science as well as developmental and educational research. Created by Dr. Herb Ginsburg and colleagues at Teachers College, Columbia University, and expanded and adapted by researchers at CASTL, the EMAS is designed to measure a broad range of mathematical content in the areas of numeracy, computation, geometry, and patterning. It is aligned with the Virginia Foundation Blocks (2013), Virginia Standards of Learning (2016), and Clements and Sarama's Mathematics Learning Trajectories.

Teachers administer the EMAS to students individually using a flip book and manipulatives. It takes approximately 20-25 minutes per student to administer in the fall and spring. Items are designed to capture a wide range and variety of early math skills. Students are not expected to get all items correct.

The EMAS was designed with three purposes in mind. First, it has applications as a formative assessment, meaning that teachers can use EMAS data to provide students with differentiated, appropriate instruction tailored to their individual needs. Second, it can be used to broadly evaluate programs or assess needs across a large group of classrooms; for example, EMAS data could help identify school divisions in need of additional support around early math. Third, it can be used as a screening tool to identify students at risk for difficulties in math.

In order to give an accurate and comprehensive picture of a kindergarten student's growth during preschool and kindergarten, the UVA team developed ~200 additional items capturing numeracy, computation, geometry, and patterning to enable the EMAS assessment to be used to measure growth across four time points from the fall of preschool through the spring of kindergarten. The VKRP research team consulted with early childhood math experts, including Herb Ginsburg, the original author of the EMAS, and colleagues at the Virginia Department of Education. The VKRP team cross-walked each item with Clements' and Sarama's (2009) learning trajectories, the Virginia Foundation Blocks early learning standards, and the 2016 Virginia Kindergarten Math Standards of Learning. *I Then the team pilottested each new item with approximately 275 children, ranging in age from 4 to 7 years old. Based on an analysis of each item, the research team constructed the spring Kindergarten EMAS. Items were selected to represent a range of skills across the four math subdomains (geometry, patterning, numeracy, and computation) and to target an appropriate average level of difficulty. The research team also deliberately selected some easier and some more challenging items so

that teachers can gauge which students need extra support and which may be exceeding grade-level expectations. Benchmarks for the spring assessment form were established based on input from early childhood math experts, Clements' and Samara's mathematics learning trajectories, and the Virginia Kindergarten Math Standards. The new EMAS scores were converted into growth scores so that teachers and schools can track students' math growth over time.

Child Behavior Rating Scale (CBRS)

The Child Behavior Rating Scale measures two areas of students' social-emotional skills: self-regulation and social skills. Self-regulation includes the skills to control one's own attention, emotions, and behaviors to cope with the demands of the school environment. xii Examples include being able to listen to teachers, following rules and multi-step directions, and staying focused on tasks. Social skills include the skills to navigate interactions and relationships with peers and adults successfully. Examples include cooperating in a group, expressing emotions, and resolving conflicts in a positive way.

The CBRS is a short rating scale that teachers complete outside of instructional time. It includes a set of 17 items that are assessed with a rating scale from 1 to 5 to determine the frequency of certain behaviors. It takes approximately 1 to 3 minutes to complete per student using the online system. It is completed twice during the school year, in the fall and in the spring.

VKRP uses the CBRS because it is reliable and valid across culturally diverse contexts. Additionally, studies have repeatedly identified the significant association between children's scores on the CBRS and their development of a wide range of outcomes. For example, CBRS scores have been associated with children's overall cognitive achievement, math, vocabulary, and literacy outcomes. XIIII XIV XV XVI Studies have also identified the relationship between children's CBRS scores and other important domains of school readiness, including attentional and inhibitory control. XVII XVIII

The self-regulation and social skills assessment (CBRS) has been validated for use with children ages three to ten years, with most studies focusing on those in preschool or kindergarten. Therefore, it was not necessary to make changes to the CBRS items for the spring of kindergarten. However, the VKRP team did need to establish new benchmarks for this timepoint. To do this, the VKRP team sent a survey to pre-kindergarten and kindergarten teachers, instructional coaches, and national experts in children's social-emotional development. The team asked participants to indicate what skills they would expect a child at the end of kindergarten to exhibit. Based on these data, as well as students' scores on the CBRS across the Commonwealth over the last five years, theoretically and empirically derived benchmarks were established for the spring CBRS social-skills and self-regulation measures.

Appendix G. How VKRP Defines Readiness for Summative Purposes

For summative purposes, VKRP defines **readiness** as having foundational skills in literacy, mathematics, self-regulation, and social skills. Students are considered "not ready" if they lack foundational skills in one or more of the areas that VKRP assesses.

The assessment tools in VKRP measure students' skills along a developmental continuum. However, it is common practice to establish benchmarks, often called thresholds or cut-points, to help determine where students fall related to a standard. For VKRP, a benchmark at the fall and spring of kindergarten were established to estimate students' school readiness in each area.

Benchmarks for the mathematics (EMAS), self-regulation, and social skills (CBRS) assessments were established using developmental expectations in conjunction with students' scores across the Commonwealth over the last four years. Students scoring below the benchmark on a specific assessment are most likely not demonstrating the level of skills one would expect for a kindergarten student in the fall or spring of kindergarten. The benchmarks vary from the fall to the spring based on increased skill level expectations.

A Note on Using Benchmarks:

Benchmarks can provide a quick, first-pass means of interpreting a student's scores. For instance, a student who scores well above the benchmark in a given early learning area likely possesses a high level of skill and could benefit from additional challenge. For students whose scores are falling well below the established benchmark for a given early learning area, additional support may be needed to help the student's skill development. Similarly, teachers will likely need to provide additional scaffolding to students whose scores are falling close to the benchmark, including those who are slightly above it.

Although derived theoretically, it is important to recognize that imposing a benchmark on a measure that assesses students' skills provides only a rough, imprecise estimate, which can be particularly problematic for students who score just above or below a particular threshold. For these reasons, it is not recommended to use whether or not a student is above or below the benchmark as the sole criterion for understanding his or her skills within an early learning domain. For all students, continual progress monitoring is critical as students develop skills at different rates and respond differently to instruction and scaffolding.

Williford, Downer, and Hamre, Virginia Kindergarten Readiness Project--Phase 2; Martha B. Bronson et al., "Child Behavior Rating Scale." Cambridge, MA: Abt Associates (1990); Herbert P. Ginsburg and Sandra Pappas. "Invitation to the Birthday Party: Rationale and Description." ZDM 48, no. 7 (2016): 947-960.

Ginsburg, H. P., Pappas, S., & Lee, Y. (2010). Early Mathematics Assessment System. An unpublished assessment measure created as part of the NIH supported project Computer Guided Comprehensive Mathematics Assessment for Young Children (Project number 1 RO1 HD051538-01).

Bronson, M. B., Goodson, B. D., Layzer, J. I., & Love, J. M. (1990). *Child Behavior Rating Scale*. Cambridge, MA: Abt Associates.

iv Williford, et al., Virginia Kindergarten Readiness. Project--Phase 2.

- ^v Williford, et al., Virginia Kindergarten Readiness. Project--Phase 2.
- vi Assembly, V. G. (2017). Joint Legislative Audit and Review Commission. <u>Improving Virginia's Early Childhood</u> <u>Development Programs</u>. Retrieved from http://jlarc.virginia.gov/2017-early-childhood-programs.asp.
- vii Ginsburg, et al., Early Mathematics Assessment System.
- viii Virginia Department of Education. (2013). *Virginia's Foundation Blocks for Early Learning for Four-Year-Olds*. Retrieved from: http://www.doe.virginia.gov/early-childhood/curriculum/foundation-blocks.pdf
- ix Virginia Department of Education. (2016). *Mathematics Standards of Learning for Virginia Public Schools*. Retrieved from: http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/2016/stds/k-12-math-sol.pdf
- * Clements, D. H., & Sarama, J. (2009). *Learning and teaching early math: The learning trajectories approach*. New York: Routledge.
- xi See citations:
- Clements & Sarama, Learning and teaching early math: The learning trajectories approach.

 Virginia Department of Education, Virginia's Foundation Blocks for Early Learning for Four-Year-Olds.

 Virginia Department of Education, Mathematics Standards of Learning for Virginia Public Schools.
- xii Bronson, M. B., Goodson, B. D., Layzer, J. I., & Love, J. M. (1990). *Child Behavior Rating Scale*. Cambridge, MA: Abt Associates.
- viii Lee, V. E., Loeb, S., & Lubeck, S. (1998). Contextual effects of prekindergarten classrooms for disadvantaged children on cognitive development: The case of chapter 1. *Child Development*, *69*(2), 479-494.
- xiv Wanless, S. B., McClelland, M. M., Acock, A. C., Chen, F., & Chen, J. (2011). Behavioral regulation and early academic achievement in Taiwan. *Early Education and Development*, 22(1), 1-28.
- ^{xv} Gestsdottir, S., von Suchodoletz, A., Wanless, S. B., Hubert, B., Guimard, P., Birgisdottir, F., & McClelland M. (2014). Early behavioral self-regulation, academic achievement, and gender: Longitudinal findings from France, Germany, and Iceland. *Applied Developmental Science*, *18*(2), 90-109.
- ^{xvi} Ponitz, C. C., McClelland, M. M., Matthew, J. S., & Morrison, F. J. (2009). Structured observation of behavioral self-regulation and its contribution to Kindergarten outcomes. *Developmental Psychology*, *25*(3), 605-619.
- ^{xvii} Kim, H. Byers, A. I., Cameron, C. E., Brock, L. L., Cottone, E. A., & Grissmer, D. W. (2016). Unique contributions of attentional control and visuomotor integration on concurrent teacher-reported classroom functioning in early elementary students. *Early Childhood Research Quarterly, 36*, 379-390.
- ^{xviii} Yang, P., & Lamb, M. E. (2014). Factors influencing classroom behavioral engagement during the first year at school. *Applied Developmental Science*, *18*(4), 189-200.

Appendix H. Domain Tables

H1: In the fall of 2020, students who attend public preschool are more likely to be categorized as ready. This is true overall and for the separate learning domains except social skills. For social skills, the advantage is for children who have no preschool experience. In the spring of 2021, students who attend public preschool are more likely to be categorized as ready. This is true overall and for the separate learning domains **except** self-regulation and social skills. Likewise, for social skills, the advantage is for children who have no preschool experience.

H1: Fall 2019, Fall 2020 and Spring 2021 Public Preschool Attendance Related to Children's Readiness by Domain

Fall 2019

Readiness			Prescho	Total			
		Public preschool				No preschool experience	
	n	%	n	%	n	%	
Overall ^a	Not Ready	13,250	46.2	11,047	58.7	24,297	51.2
Overall	Ready	15,425	53.8	7,777	41.3	23,202	48.8
Literacy ^b	Not Ready	4,240	14.8	6,820	36.2	11,606	23.3
Literacy	Ready	24,435	85.2	12,004	63.8	36,439	76.7
Math ^c	Not Ready	6,525	22.8	6,930	36.7	13,455	28.3
IVIALII	Ready	22,150	77.2	11,894	63.2	34,044	71.7
Self-Regulation ^d	Not Ready	6,153	21.5	4,648	24.7	10,801	22.7
Sell-Regulation	Ready	22,522	78.5	14,176	75.3	36,698	77.3
Cooled Chille	Not Ready	7,294	25.4	3,773	20.0	11,067	23.3
Social Skills ^e	Ready	21,381	74.6	15,051	80.0	36,432	76.7
Total		28,675	100.0	18,824	100.0	47,499*	100.0

Fall 2020

Readiness			Preschoo				
		Public pi	reschool	No preschool experience		Total	
		n	%	n	%	n	%
Overall ^a	Not Ready	5794	47.5	4,023	58.3	9,818	51.4
Overall	Ready	6,400	52.5	2,874	41.7	9,274	48.6
Literacy ^b	Not Ready	3,158	25.9	2,974	43.1	6,132	32.1
Literacy	Ready	9,036	74.1	3,924	56.9	12,960	67.9
Math ^c	Not Ready	2,794	22.9	1,996	28.9	4,790	25.1
	Ready	9,400	77.1	4,902	71.1	14,302	74.9
Self-Regulation ^d	Not Ready	2,155	17.7	1,368	19.8	3,523	18.5
Sell-Regulation	Ready	10,039	82.3	5,530	80.2	15,569	81.5
Social Skille	Not Ready	2,397	19.7	1,213	17.6	3,610	18.9
Social Skills ^e	Ready	9,797	80.3	5,685	82.4	15,482	81.1
Total		12,194	100.0	6,898	100.0	19,092*	100.0

Spring 2021

Readiness			Prescho					
		Public pi	Public preschool		No preschool experience		Total	
		n	%	n	%	n	%	
Overalla	Not Ready	16,192	60.4	10,591	61.9	26,783	61.0	
Overall	Ready	10,638	39.6	6,506	38.1	17,144	39.0	
Literacy ^b	Not Ready	10,364	38.6	7,278	42.6	17,642	40.2	
Literacy	Ready	16,466	61.4	9,819	57.4	26,285	59.8	
Math ^c	Not Ready	10,957	40.8	7,479	43.7	18,436	42.0	
IVIALII	Ready	15,873	59.2	9,618	56.3	25,491	58.0	
Self-Regulation ^d	Not Ready	7,205	26.9	4,554	26.6	11,759	26.8	
Self-Regulation	Ready	19,625	73.1	12,543	73.4	32,168	73.2	
Social Skills ^e	Not Ready	5,341	19.9	3,027	17.7	8,368	19.0	
	Ready	21,489	80.1	14,070	82.3	35,559	81.0	
Total		26,830	100.0	17,097	100.0	43,927*	100.0	

^{*} Students missing one or more of the readiness assessments or preschool status were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H2: In the fall of 2020 and spring of 2021, students identified from low-income backgrounds are more likely to be categorized as not ready. This is true overall and for the four separate learning domains.

H2: Fall 2019, Fall 2020 and Spring 2021 Readiness by Domains for Students from Low-Income Backgrounds

Fall 2019

Readiness			Sc						
		Missing		Not Low-Income		Low-Income		Total	
			%	n	%	n	%	n	%
Overall ^a	Not Ready	586	41.6	19,399	36.8	17,620	55.5	37,605	43.8
Overall	Ready	824	58.4	33,342	63.2	14,138	44.5	48,304	56.2
Literacy ^b	Not Ready	224	15.9	6,507	12.3	8,124	25.6	14,855	17.3
Literacy	Ready	1,186	84.1	46,234	87.7	23,634	74.4	71,054	82.7
Math ^c	Not Ready	274	19.4	7,556	14.3	10,206	32.1	18,036	21.0
	Ready	1,136	80.6	45,185	85.7	21,552	67.9	67,873	79.0
Self-Regulation ^d	Not Ready	323	22.9	8,431	16.0	7,826	24.6	16,580	19.3
Sell-Regulation	Ready	1,087	77.1	44,310	84.0	23,932	75.4	69,329	80.7
Social Skills ^e	Not Ready	283	20.1	10,438	19.8	8,131	25.6	18,852	21.9
Social Skills	Ready	1,127	79.9	42,303	80.2	23,627	74.4	67,057	78.1
Total		1,410	100.0	52,741	100.0	31,758	100.0	85,909*	100.0

Fall 2020

			Sc	cioecono	mic Stat	us			
Readiness		Missing		Not low-	-Income	Low-Income		Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	356	61.6	7,551	38.8	6,309	55.5	14,216	45.3
Overall	Ready	222	38.4	11,895	61.2	5,060	44.5	17,177	54.7
Literacy ^b	Not Ready	276	47.8	4,382	22.5	3,973	34.9	8,631	27.5
Literacy	Ready	302	52.2	15,064	77.5	7,396	65.1	22,762	72.5
Math ^c	Not Ready	191	33.0	2,983	15.3	3,310	29.1	6,484	20.7
	Ready	387	67.0	16,463	84.7	8,059	70.9	24,909	79.3
Self-Regulation ^c	Not Ready	129	22.3	2,657	13.7	2,246	19.8	5,032	16.0
Seir-Regulation	Ready	449	77.7	16,789	86.3	9,123	80.2	26,361	84.0
Social Skills ^e	Not Ready	132	22.8	2,945	15.1	2,316	20.4	5,393	17.2
Ready		443	77.2	16,501	84.9	9,053	79.6	26,000	82.8
Total		578	100.0	19,446	100.0	11,369	100.0	31,393*	100.0

Spring 2021

			Sc	ocioecono	mic Stat	us			
Readiness		Missing		Not Low	-Income	Low-Ir	icome	Total	
		n	%	n	%	n	%	n	%
Overalla	Not Ready	363	63.4	15,902	38.9	22,270	67.2	38,535	51.6
Overall	Ready	210	36.6	24,994	61.1	10,893	32.8	36,097	48.4
Literacy ^b	Not Ready	270	47.1	7,756	19.0	15,269	46.0	23,295	31.2
Literacy	Ready	303	52.9	33,140	81.0	17,894	54.0	51,337	68.8
N 4 a + b C	Not Ready	251	43.8	8,698	21.3	15,763	47.5	24,712	33.1
Math ^c	Ready	322	56.2	32,198	78.7	17,400	52.5	49,920	66.9
Self-Regulation ^c	Not Ready	150	26.2	6,584	16.1	9,952	30.0	16,686	22.4
Sell-Regulation	Ready	423	73.8	34,312	83.9	23,211	70.0	57,946	77.6
Social Skills ^e	Not Ready	107	18.7	5,650	13.8	6,892	20.8	12,649	16.9
Ready		466	81.3	35,246	86.2	26,271	79.2	61,983	83.1
Total		573	100.0	40,896	100.0	33,163	100.0	74,632*	100.0

^{*} Students missing one or more of the readiness assessments were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H3: For both fall 2020 and spring 2021, students from low-income backgrounds who attend public preschool are more likely to be categorized as ready. This is true overall and for the separate learning domains <u>except</u> self-regulation and social skills.

H3. Fall 2019, Fall 2020 and Spring 2021 Domain Areas by Public Preschool Experience for Students from Low-Income Backgrounds

Fall 2019

			Preschoo				
Readiness		Public preschool		No preschool experience		Total	
		n	%	n	%	n	%
Overall ^a	Not Ready	8,539	50.4	5,822	64.6	14,361	56.2
Overall	Ready	8,405	49.6	2,792	32.4	11,197	43.8
Literacy ^b	Not Ready	2,941	17.4	3,862	44.8	6,803	26.6
Literacy	Ready	14,003	82.6	4,752	55.2	18,755	73.4
Math ^c	Not Ready	4,535	26.8	3,978	46.2	8,513	33.3
	Ready	12,409	73.2	4,636	53.8	17,045	66.7
Self-Regulation ^d	Not Ready	3,906	23.1	2,444	28.4	6,350	24.8
Self-Regulation	Ready	13,038	76.9	6,170	71.6	19,208	75.2
Social Skills ^e	Not Ready	4,552	26.9	1,905	22.1	6,457	25.3
Social Skills	Ready	12,392	73.1	6,709	77.9	19,101	74.7
Total		16,944	100.0	8,614	100.0	25,558*	100.0

Fall 2020

			Preschoo	ol Status		Total		
Readiness		Public p	reschool	No pre exper				
		N	%	n	%	n	%	
Overalla	Not Ready	3,780	52.3	1,409	67.7	5,189	55.8	
Overall	Ready	3,443	47.7	672	32.3	4,115	44.2	
Literacy ^b	Not Ready	2,142	29.7	1,094	52.6	3,236	34.8	
Literacy	Ready	5,081	70.3	987	47.4	6,068	65.2	
Math ^c	Not Ready	1,949	27.0	797	38.3	2,746	29.5	
	Ready	5,274	73.0	1,284	61.7	6,558	70.5	
Self-Regulation ^d	Not Ready	1,419	19.6	442	21.2	1,861	20.0	
Sell-Regulation	Ready	5,804	80.4	1,639	78.8	7,443	80.0	
Social Skills ^e	Not Ready	1,526	21.1	412	19.8	1,938	20.8	
Social Skills	Ready	5,697	78.9	1,669	80.2	7,366	79.2	
Total		7,223	100.0	2,081	100.0	9,304*	100.0	

Spring 2021

			Preschoo	ol Status			
Readiness		Public preschool		No preschool experience		Total	
		N	%	n	%	n	%
Overalla	Not Ready	11,761	66.9	6,493	71.6	18,254	68.5
Overall	Ready	5,830	33.1	2,570	28.4	8,400	31.5
Literacy ^b	Not Ready	7,973	45.3	4,756	52.5	12,729	47.8
Literacy	Ready	9,618	54.7	4,307	47.5	13,925	52.2
NA-+L-C	Not Ready	8,299	47.2	4,819	53.2	13,118	49.2
Math ^c	Ready	9,292	52.8	4,244	46.8	13,536	50.8
Self-Regulation ^d	Not Ready	5,295	30.1	2,866	31.6	8,161	30.6
Self-Regulation	Ready	12,296	69.9	6,197	68.4	18,493	69.4
Social Skills ^e	Not Ready	3,757	21.4	1,799	19.8	5,556	20.8
Social Skills	Ready	13,834	78.6	7,264	80.2	21,098	79.2
Total		17,591	100.0	9,063	100.0	26,654*	100.0

^{*} Students missing one or more of the readiness assessments or preschool status were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H4: In the fall of 2020 and in the spring of 2021, students identified with a disability are more likely to be categorized as not ready. This is true overall and for the four separate learning domains.

H4. Fall 2019, Fall 2020 and Spring 2021 Areas of Readiness for Students with Disabilities

Fall 2019

				Disabilit	y Status				
Readiness		Missing		Students without a disability		Students with a disability		Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	586	41.6	32,476	41.9	4,543	65.7	37,605	43.8
Overali	Ready	824	58.4	45,110	58.1	2,370	34.3	48,304	56.2
Literacy ^b	Not Ready	224	15.9	12,872	16.6	1,759	25.4	14,855	17.3
Literacy	Ready	1,186	84.1	64,714	83.4	5,154	74.6	71,054	82.7
Math ^c	Not Ready	274	19.4	15,128	19.5	2,634	38.1	18,036	21.0
	Ready	1,136	80.6	62,458	80.5	4,279	61.9	67,873	79.0
Self-Regulation ^d	Not Ready	323	22.9	13,491	17.4	2,766	40.0	16,580	19.3
Sell-Regulation	Ready	1,087	77.1	64,095	82.6	4,147	60.0	69,329	80.7
Social Skills ^e	Not Ready	283	20.1	15,995	20.6	2,574	37.2	18,852	21.9
Ready		1,127	79.9	61,591	79.4	4,339	62.8	67,057	78.1
Total		1,410	100.0	77,586	100.0	6,913	100.0	85,909*	100.0

Fall 2020

				Disabilit	y Status				
Readiness		Missing		Students without a disability		Students with a disability		Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	395	60.5	11,973	42.8	1,848	66.1	14,216	45.3
Overall	Ready	258	39.5	15,970	57.2	949	33.9	17,177	54.7
Literacy ^b	Not Ready	296	45.3	4,224	25.9	1,111	39.7	8,631	27.5
Literacy	Ready	357	54.7	20,719	74.1	1,686	60.3	22,762	72.5
Math ^c	Not Ready	204	31.2	5,147	18.4	1,133	40.5	6,484	20.7
	Ready	449	68.8	22,796	81.6	1,664	59.5	24,909	79.3
Self-Regulation ^c	Not Ready	144	22.1	3,911	14.0	977	34.9	5,032	16.0
Sell-Regulation	Ready	509	77.9	24,032	86.0	1,820	65.1	26,361	84.0
Social Skills ^e	Not Ready	154	23.6	4,489	16.1	750	26.8	5,393	17.2
Ready		499	76.4	23,454	83.9	2,047	73.2	26,000	82.8
Total		653	100.0	27,943	100.0	2,797	100.0	31,393*	100.0

Spring 2021

				Disabilit	y Status				
Readiness		Missing		Students without a disability		Students with a disability		Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	533	62.3	32,907	49.2	5,095	74.5	38,535	51.6
Overall	Ready	323	37.7	34,030	50.8	1,744	25.5	36,097	48.4
Literacy ^b	Not Ready	357	41.7	19,469	29.1	3,469	50.7	23,295	31.2
Literacy	Ready	499	58.3	47,468	70.9	3,370	49.3	51,337	68.8
Math ^c	Not Ready	362	42.3	20,722	31.0	3,628	53.0	24,712	33.1
	Ready	494	57.7	46,215	69.0	3,211	47.0	49,920	66.9
Self-Regulation ^c	Not Ready	237	27.7	13,451	20.1	2,998	43.8	16,686	22.4
Sell-Regulation	Ready	619	72.3	53,486	79.9	3,841	56.2	57,946	77.6
Social Skills ^e	Not Ready	170	19.9	10,345	15.5	2,134	31.2	12,649	16.9
SUCIAI SKIIIS	Ready	686	80.1	56,592	84.5	4,705	68.8	61,983	83.1
Total		856	100.0	66,937	100.0	6,839	100.0	74,632*	100.0

^{*} Students missing one or more of the readiness assessments were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H5: In the fall of 2020, students identified as ELL are more likely to be categorized as not ready. This is true overall and for the separate learning domains <u>except</u> social skills. In the spring of 2021, students identified as ELL are more likely to be categorized as not ready. This is true overall and for the separate learning domains.

H5. Fall 2019, Fall 2020 and Spring 2021 Areas of Readiness by ELL Status

Fall 2019

Readiness		Missing		Not	Not ELL		.L	Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	586	41.6	29,717	40.7	7,302	63.8	37,605	43.8
Overall	Ready	824	58.4	43,336	59.3	4,144	36.2	48,304	56.2
Literacy ^b	Not Ready	224	15.9	10,470	14.3	4,161	36.4	14,855	17.3
Literacy	Ready	1,186	84.1	62,583	85.7	7,285	63.6	71,054	82.7
Math ^c	Not Ready	274	19.4	12,621	17.3	5,141	44.9	18,036	21.0
	Ready	1,136	80.6	60,432	82.7	6,305	55.1	67,873	79.0
Self-Regulation ^d	Not Ready	323	22.9	13,385	18.3	2,872	25.1	16,580	19.3
Self-Regulation	Ready	1,087	77.1	59,668	81.7	8,574	74.9	69,329	80.7
Social Skills ^e	Not Ready	283	20.1	15,991	21.9	2,578	22.5	18,852	21.9
Ready		1,127	79.9	57,062	78.1	8,868	77.5	67,057	78.1
Total		1,410	100.0	73,053	100.0	11,446	100.0	85,909*	100.0

Fall 2020

				ELL S	tatus				
Readiness		Missing		Not	Not ELL		L	Total	
		n	%	n	%	n	%	n	%
Overall ^a	Not Ready	356	61.6	12,612	43.5	1,248	69.8	14,216	45.3
Overall	Ready	222	38.4	16,414	56.5	541	30.2	17,177	54.7
Literacy ^b	Not Ready	276	47.8	7,406	25.5	949	53.0	8,631	27.5
Literacy	Ready	302	52.2	21,620	74.5	840	47.0	22,762	72.5
Math ^c	Not Ready	191	33.0	5,475	18.9	818	45.7	6,484	20.7
	Ready	387	67.0	23,551	81.1	971	54.3	24,909	79.3
Self-Regulation ^c	Not Ready	129	22.3	4,567	15.7	336	18.8	5,032	16.0
Self-Regulation	Ready	449	77.7	24,459	84.3	1,453	81.2	26,361	84.0
	Not Ready	132	22.8	4,954	17.1	307	17.2	5,393	17.2
Social Skills ^e	Ready	446	77.2	24,072	82.9	1,482	82.8	26,000	82.8
Total		578	100.0	29,026	100.0	1,789	100.0	31,393*	100.0

Spring 2021

				ELL S	tatus				
Readiness		Missing		Not	ELL	El	L	Total	
		n	%	n	%	n	%	n	%
O	Not Ready	367	63.6	30,308	48.2	7,860	70.3	38,535	51.6
Overall ^a	Ready	210	36.4	32,559	51.8	3,328	29.7	36,097	48.4
Literacy ^b	Not Ready	273	47.3	17,373	27.6	5,649	50.5	23,295	31.2
Literacy	Ready	304	52.7	45,494	72.4	5,539	49.5	51,337	68.8
N. A L. C	Not Ready	255	44.2	18,410	29.3	6,047	54.0	24,712	33.1
Math ^c	Ready	322	55.8	44,457	70.7	5,141	46.0	49,920	66.9
Self-Regulation ^d	Not Ready	153	26.5	13,335	21.2	3,198	28.6	16,686	22.4
Self-Regulation	Ready	424	73.5	49,532	78.8	7,990	71.4	57,946	77.6
	Not Ready	109	18.9	10,426	16.6	2,114	18.9	12,649	16.9
Social Skills ^e Ready		468	81.1	52,441	83.4	9,074	81.1	61,983	83.1
Total		577	100.0	62,867	100.0	11,188	100.0	74,632*	100.0

^{*} Students missing one or more of the readiness assessments were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H6: In both the fall of 2020 and spring of 2021, Hispanic/Latino of any race, Black or African American, and American Indian or Alaska native students were more likely to be categorized as not ready. This is true overall and for the separate learning domains.

H6. Fall 2019, Fall 2020 and Spring 2021 Areas of Readiness by Race and Ethnicity

Fall 2019

		Overall <u>R</u>	Tot	tal		
Race/Ethnic Code	Not R	eady	Ready			
	n	%	N	%	n	%
Asian	1,944	33.3	3,891	66.7	5,835	100.0
White	15,129	37.1	25,704	62.9	40,833	100.0
Non-Hispanic/Latino, two or more races	2,424	40.5	3,554	59.5	5,978	100.0
Native Hawaiian or Pacific Islander	58	41.7	81	58.3	139	100.0
American Indian or Alaska Native	111	49.6	113	50.4	224	100.0
Black or African American	9,319	52.6	8,394	47.4	17,713	100.0
Hispanic/Latino of any race	8,034	58.3	5,743	41.7	13,777	100.0
Total	37,019	43.8	47,480	56.2	84,499*	100.0

Fall 2020

		Overall <u>R</u>	Total				
Race/Ethnic Code	Not Ready		Ready				
	n	%	N	%	n	%	
Asian	183	31.2	404	68.8	587	100.0	
Native Hawaiian or Other Pacific Islander	15	33.3	30	66.7	45	100.0	
White	7,280	39.3	11,255	60.7	18,535	100.0	
Non-Hispanic/Latino, two or more races	1,153	48.1	1,246	51.9	2,399	100.0	
Black or African American	3,011	54.4	2,521	45.6	5,532	100.0	
American Indian or Alaska Native	43	57.3	32	42.7	75	100.0	
Hispanic/Latino of any race	2,175	59.7	1,467	40.3	3,642	100.0	
Total	13,860	45.0	16,955	55.0	30,815*	100.0	

Spring 2021

Race/Ethnic Code		Overall R	Total			
	Not Ready				Ready	
	n	%	n	%	n	%
Asian	1,885	34.5	3,578	65.5	5,463	100.0
White	13,906	41.7	19,458	58.3	33,364	100.0
Native Hawaiian or Other Pacific Islander	49	47.1	55	52.9	104	100.0
Non-Hispanic/Latino, two or more races	2,649	48.4	2,820	51.6	5,469	100.0
American Indian or Alaska Native	96	49.2	99	50.8	195	100.0
Black or African American	10,369	65.4	5,476	34.6	15,845	100.0
Hispanic/Latino of any race	9,218	67.7	4,401	32.3	13,619	100.0
Total	38,172	51.5	35,887	48.5	74,059*	100.0

^{*} Students missing one or more of the readiness assessments or race/ethnicity codes were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).

H7: In the fall of 2020, male students are more likely to be categorized as not ready. This is true overall and for the separate learning domains. In the spring of 2021, male students are more likely to be categorized as not ready. This is true overall and for the separate learning domains, except mathematics.

H7. Fall 2019, Fall 2020 and Spring 2021 Areas of Readiness by Gender

Fall 2019

Readiness			Ger	nder			
		Fem	nale	le Male		Total	
		n	%	n	%	n	%
Overall ^a	Not Ready	15,514	37.5	21,505	49.8	37,019	43.8
	Ready	25,817	62.5	21,663	50.2	47,480	56.2
Literacy ^b	Not Ready	6,615	16.0	8,016	18.6	14,631	17.3
	Ready	34,716	84.0	35,152	81.4	69,868	82.7
Math ^c	Not Ready	8,345	20.2	9,417	21.8	17,762	21.0
	Ready	32,986	79.8	33,751	78.2	66,737	79.0
Self-Regulation ^d	Not Ready	5,176	12.5	11,081	25.7	16,257	19.2
	Ready	36,155	87.5	32,087	74.3	68,242	80.0
Social Skills ^e	Not Ready	6,440	15.6	12,129	28.1	18,569	22.0
	Ready	34,891	84.4	31,039	71.9	65,930	78.0
Total		41,331	100.0	43,168	100.0	84,499*	100.0

Fall 2020

Readiness			Gender					
		Fem	Female		Male		Total	
		n	%	n	%	n	%	
Overall ^a	Not Ready	6,074	40.3	7,786	48.5	13,860	45.0	
Overall	Ready	8,999	59.7	7,956	50.5	16,955	55.0	
Literacy ^b	Not Ready	3,799	25.2	4,556	28.9	8,355	27.1	
	Ready	11,274	74.8	11,186	71.1	22,460	72.9	
Math ^c	Not Ready	2,884	19.1	3,409	21.7	6,293	20.4	
	Ready	12,189	80.9	12,333	78.3	24,522	79.6	
Self-Regulation ^d	Not Ready	1,687	11.2	3,216	20.4	4,903	15.9	
	Ready	13,386	88.8	12,526	79.6	25,912	84.1	
Social Skills ^e	Not Ready	2,123	14.1	3,138	19.9	5,261	17.1	
	Ready	12,950	85.9	12,604	80.1	25,554	82.9	
Total		15,073	100.0	15,742	100.0	30,815*	100.0	

Spring 2021

Readiness		Gender Female Male				Total	
		_	0/		0/	n	n %
	Not Boody	n 17,408	% 48.0	n 20,759	% 54.9	38,167	51.5
Overall ^a	Not Ready				45.1	•	
	Ready	18,837	52.0	17,050		35,887	48.5
Literacy ^b	Not Ready	10,568	29.2	12,454	32.9	23,022	31.1
	Ready	25,677	70.8	25,355	67.1	51,032	68.9
Math ^c	Not Ready	12,109	33.4	12,347	32.7	24,456	33.0
	Ready	24,136	66.6	25,462	67.3	49,598	67.0
Self-Regulation ^d	Not Ready	5,961	16.4	10,571	28.0	16,532	22.3
	Ready	30,284	83.6	27,238	72.0	57,522	77.7
Social Skills ^e	Not Ready	4,693	12.9	7,846	20.8	12,539	16.9
	Ready	31,552	87.1	29,963	79.2	61,515	83.1
Total		36,245	100.0	37,809	100.0	74,054*	100.0

^{*} Students missing one or more of the readiness assessments or gender were not included.

Note. Students with complete readiness assessment and race/ethnicity data were included. Use caution when comparing data across years (see p.14 for explanation).