

Maryland's Largest School District

MONTGOMERY COUNTY PUBLIC SCHOOLS

Expanding Opportunity and Unleashing Potential

Montgomery County Public Schools Montgomery Virtual Academy (MVA) Program

2021-2022









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Shared Accountability
Applied Research and Evaluation



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MVA Evaluation 2021-2022

Executive Summary

Examination of Implementation and Outcomes

Evaluation Scope

The evaluation of the MCPS Virtual Academy during the 2021-2022 school year was conducted to examine the first-year implementation of full-time, virtual K–12 education in MCPS and analyze the attendance and academic achievement of students enrolled in the MVA program compared to their peers attending in-person schools. This report includes survey findings reported to program administrators, MCPS leadership, and the Board of Education in the spring of March 2022, findings from stakeholder focus groups conducted in the spring of 2022, and end-of-year student outcomes from 2022. This is the final report that summarizes all of this information.

Methods

A multi-method design was used to evaluate the 2022 MCPS Virtual Academy program. To assess implementation, surveys and focus groups were used to gather information. Surveys regarding the experiences of students, teachers and paraeducators, and parents/guardians in the program were administered, and response rates were 15.1% for students (n=252), 72% for teacher and paraeducators (n=149) and 28.6% for parents (n=610). Follow-up focus groups gathered additional feedback from 112 participants across 24 key stakeholder groups. To assess attendance rates and achievement outcomes of MVA students compared to students attending in-person schools while controlling for students' characteristics, including their academic achievement.

Key Findings

In 2021-2022, MCPS implemented a full-time virtual program for students in grades K–12 that was analogous to learning provided at in-person schools, with some exceptions. The staffing structure was similar to in-person schools, with a team of central office administrators for elementary and secondary teachers, paraeducators, guidance counselors, special education and English Language Development (ELD) teachers. However, social studies and science were delivered fully asynchronously to accommodate large elementary enrollments, and the amount of time for elementary literacy instruction was reduced. Across grade levels, a larger proportion of Black/African American students enrolled in MVA compared to the MCPS population, and larger proportions of Asian students enrolled in MVA compared to the MCPS population at the elementary and middle school levels.

MVA Evaluation 2021-2022

Executive Summary

Examination of Implementation and Outcomes

Key Findings

Staff, particularly at the elementary level, noted that attendance was an issue for students, and attendance data mirrors this information. Significantly higher percentages of Grade 2–5 students were chronically absent compared with students attending in-person schools; middle and high school students had similar attendance rates to their in-person peers.

Like the attendance data, there were differences in achievement by level of schooling. Elementary MVA students had significantly lower achievement scores than same-grade peers in comparison schools. Students in Grades 1 through 5 attending Virtual Academy were significantly less likely than their in-person peers to meet their projected growth in math in Spring 2022. Likewise, for reading, MVA students in Grades 3, 4, and 5 were significantly less likely than their in-person peers to meet their projected growth in Spring 2022.

However, middle and high school students had similar achievement scores compared to their in-person peers. Among students in middle school, math and reading performance, as measured by MAP-M and MAP-R, was similar for MVA students and in-person students. High school students in MVA had GPAs similar to comparison students in Grades 9, 10, and 11; in Grade 12, in-person students had higher GPAs than MVA students.

Conclusion & Recommendations

MVA provides an option for many students who benefit from learning in an online environment, such as students with health or physical issues, students with family members with health issues, and students with unique learning profiles. Additionally, stakeholder feedback revealed that MVA fostered strong relationships between students and staff, offered individualized learning, and provided access for students with unique learning profiles. Families appreciated MVA's efforts to create more social opportunities during the semester but also asked that more social-emotional opportunities be embedded into the curriculum and school day.

Community desire for virtual education needs to be balanced with the consideration that in-person learning may yield better academic outcomes than virtual instruction - particularly for elementary students. Furthermore, outcome data and stakeholder feedback revealed attendance as an issue for elementary MVA students compared to their in-person peers. Continued monitoring of attendance, achievement, student satisfaction, and direct feedback from stakeholders, particularly at the individual level, is essential to understand the extent to which the MVA is effective for students and when adjustments are needed to a student's educational program.



Evaluation Scope

Background

The Department of Shared Accountability evaluated the MCPS MVA during the 2021-2022 school year. The purpose of this evaluation was to facilitate future implementation efforts of full-time, virtual instruction in MCPS and assess the school-year attendance and academic achievement of MVA students enrolled in the program compared to their peers attending in-person schools. Mid-year student outcomes and survey findings were reported to program administrators, MCPS leadership, and the Board of Education in March 2022. Stakeholder focus groups were conducted in the spring of 2022, and end-of-year student outcomes were analyzed to provide additional information for the evaluation. This is the final report that includes focus group findings and student outcomes.

Purpose of Evaluation



Gather stakeholder feedback through surveys and focus groups to provide information to support the implementation of K-Grade 12 comprehensive online school model.



Analyze the effect of the model on student attendance and achievement.

Research Questions



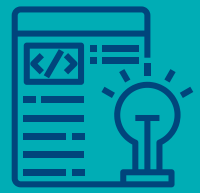
What were the experiences and perceptions of stakeholders (school staff, students, families) with implementing the MVA?



How did the attendance of students enrolled at MVA compare with that of similar students enrolled at in-person schools?



How did MVA students perform in literacy and math compared with similar students attending in-person schools?



Program Description

Overview

- In 2020 – 2021, MCPS began offering full-time virtual instruction in Kindergarten through Grade 12. A full-day of synchronous instruction was provided five days per week. Bell times aligned with most schools. A common 60-minute lunch and wellness break were provided at both levels.
- *Elementary students* had a common morning meeting to build community, then rotated through three 75-minute academic blocks and 45 minutes for specials and enrichment. To accommodate large elementary enrollments, social studies, and science were delivered fully asynchronously, and the amount of time for literacy instruction was reduced.
- *Secondary-level students* had a block rotation schedule; courses met on alternating days. Live, 45-minute advisory sessions occurred three times per week.

Program Goals



Provide a K–Grade 12 comprehensive program five days per week in an online environment.



Provide a full staff of counselors, special education, and ELD teachers and other specialized positions that deliver needed services.

Program Components



Full-day, synchronous instruction, five days per week.



MCPS curriculum for all grades and secondary core courses that meet MSDE and graduation requirements.



State and local assessments that mirror in-person schooling with state assessments completed at student's home school, and local assessments completed online.



Activities and clubs provided by the home school as MVA works to develop their own offerings.

Implementation Methods

A multi-method design was used to examine the implementation of the MVA program through the experiences and perceptions of stakeholders.

Data & Measures

- **Stakeholder Surveys** of students in Grade 4 through 12, parents/guardians, and teachers
- **Focus groups** with students, parents/guardians, teachers, and administrators were in May and June of 2022 and conducted virtually.

Sample

- Surveys were administered in February 2022. Response rates were **15%** for students, **29%** for parents/guardians, and **72%** for teachers and paraeducators.
- Twenty-four focus groups were conducted with teachers, paraeducators, parents/guardians, and students, with **112** participants providing feedback.

Analysis

- Descriptive summary statistics were computed for the structured items in the survey. Survey questions were combined to calculate topic area scores across five domains.
- Focus group responses were categorized into themes. Major focus group themes were identified and reported based on the prevalence of responses across groups.

Outcome Methods

A quasi-experimental design was used to assess the impact of MVA on student attendance and math and reading performance. MVA students were compared with students attending in-person schools on multiple academic measures.

Data & Measures

- **Attendance:** Mean school attendance rate for the 2021-2022 school year and chronic absenteeism (absent more than 10% days enrolled).
- **Math:** The MAP-M Expected Growth score was used to measure elementary and middle school student math performance; end-of-year math grades measured secondary student course performance.
- **English Language Arts:** The MAP-RF Oral Reading Level and MAP-R Expected Growth scores were used to measure elementary student reading performance end-of-year English grades.
- **GPA** also measured secondary student academic performance.

Sample

- Students enrolled in Virtual Academy during the 2021– 2022 school year comprised the participant group. A total of 1,349 elementary, 656 middle, and 742 high school students attended the Virtual Academy in 2021– 2022. A matching procedure identified students within each grade for the comparison group attending in-person schools. The analysis did not include students receiving special education services as the variation in the amount and type of services provided varied widely across students enrolled in MVA, and a comparable sample at in-person schools could not be created.

Analysis

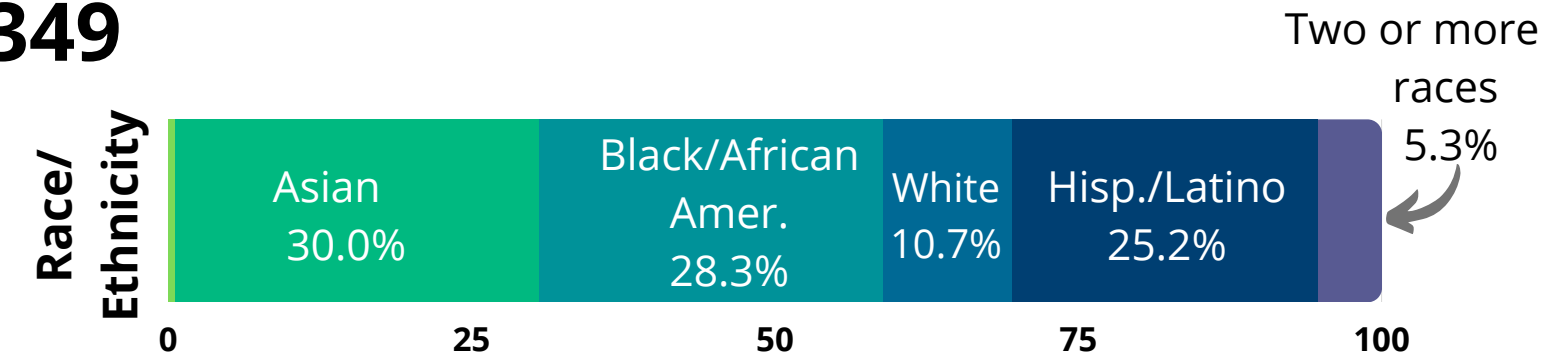
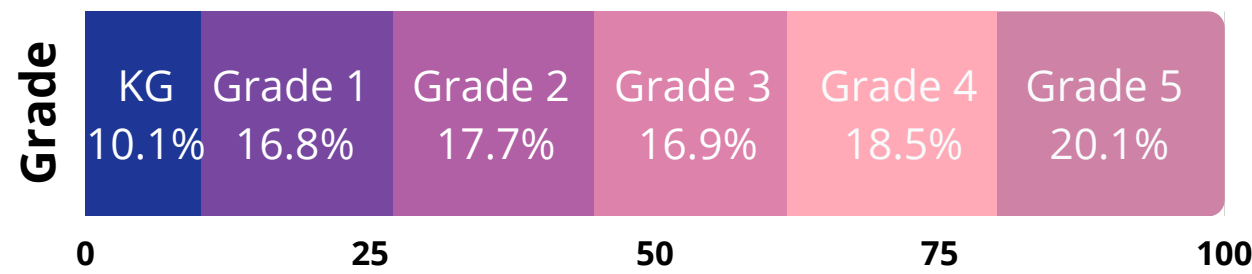
- Analysis of covariance (ANCOVA) was used to determine if there were statistically significant differences in student attendance of MVA students and their non-MVA peers while controlling for demographic characteristics and prior achievement. Chi-square analyses were used to test for differences in math and reading performance between the two groups.



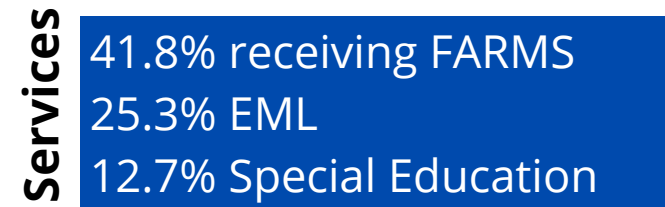
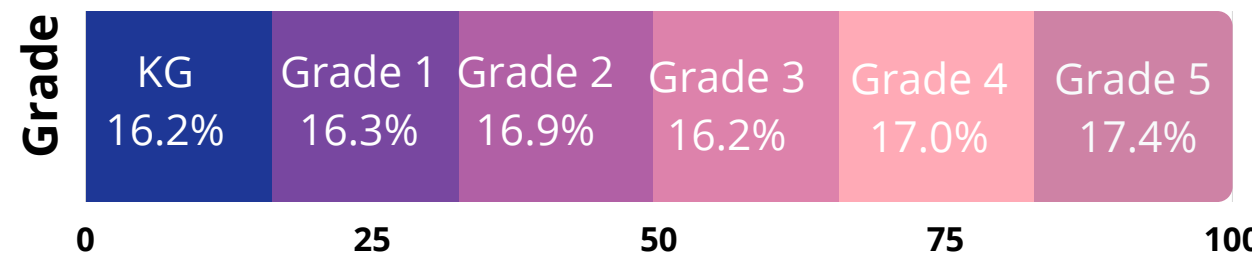
Characteristics of MVA Students Compared with all MCPS Students

Elementary

MVA Elementary students N = 1,349



MCPS Elementary students N = 71,044



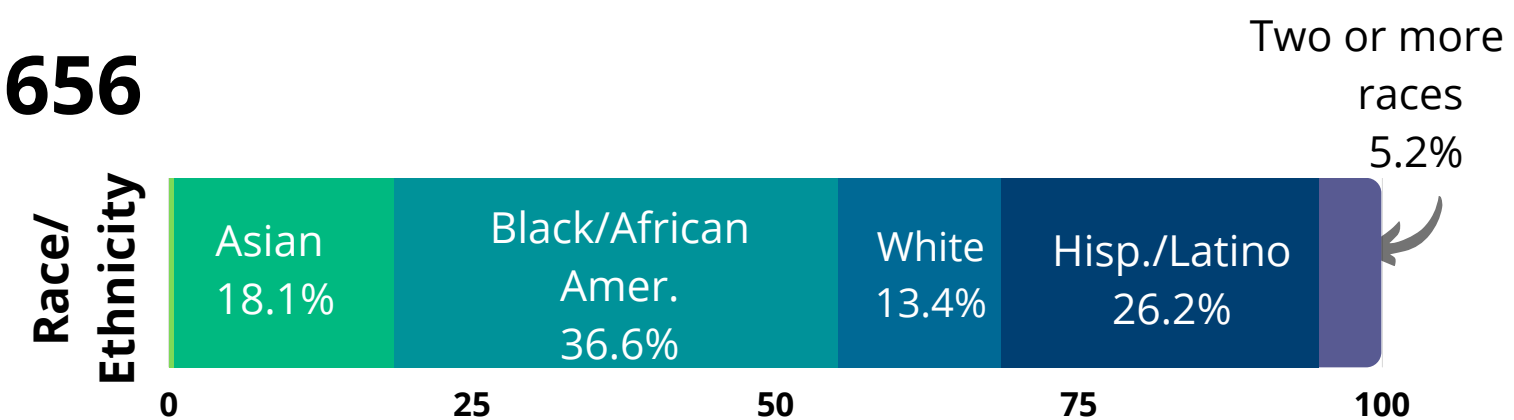
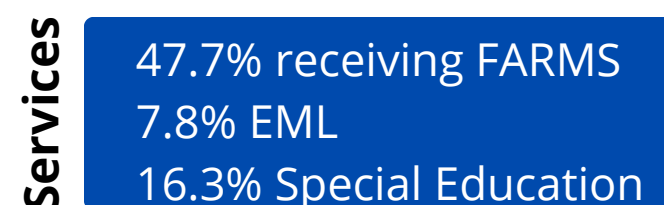
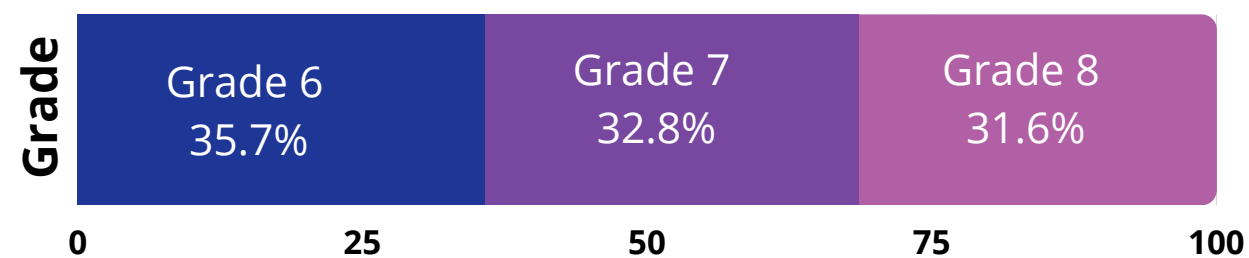
- The percentage of students in each grade was fairly evenly distributed, but with a smaller percentage of MVA students in kindergarten compared with the MCPS student population and a slightly larger percentage of MVA students in Grade 5 compared to the MCPS student population.
- A slightly higher percentage of MVA students received FARMS, and a smaller percentage of MVA students were EMLs compared with MCPS overall. The percentage of special education students at the elementary level was similar for MVA and MCPS.
- The race/ethnicity of students enrolled in the elementary MVA differed from the MCPS population overall: larger percentages of Asian (30.0% vs. 13.7%) and Black or African American students (28.3% vs. 21.8%) and smaller percentages of White (10.7% vs. 24.0%) and Hispanic/Latino students (25.2% vs. 34.8%), made up the MVA compared with MCPS enrollment.



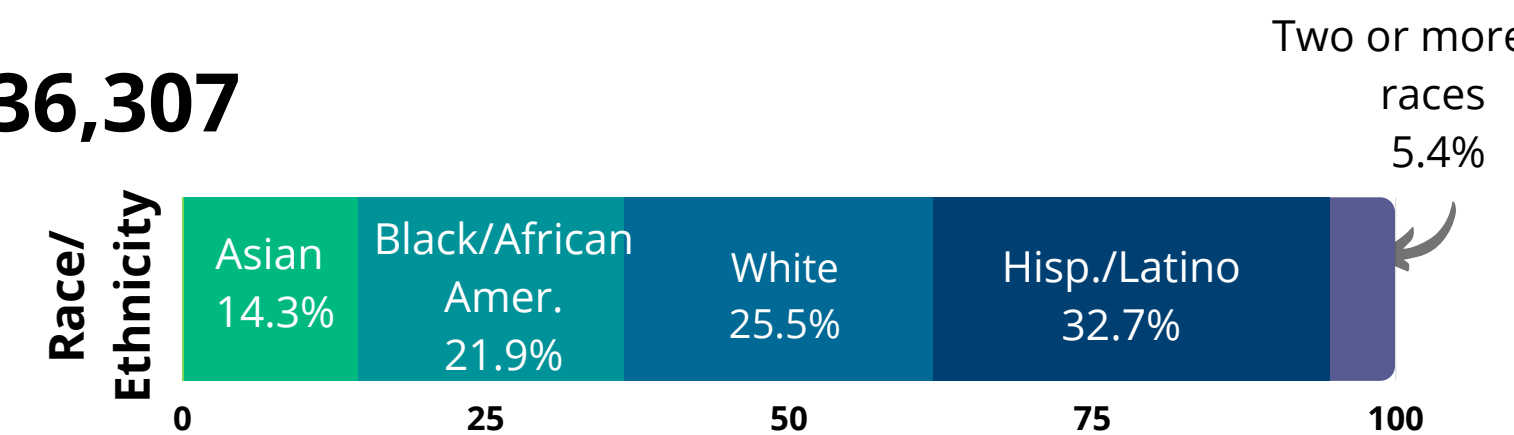
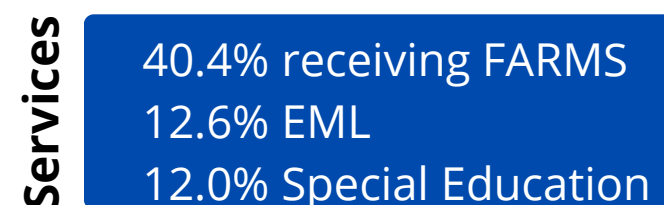
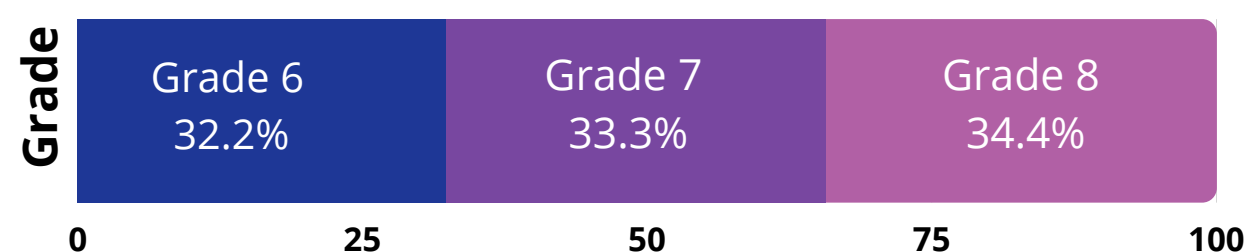
Characteristics of MVA Students Compared with all MCPS Students

Middle School

MVA Middle School students N = 656



MCPS Middle School students N = 36,307



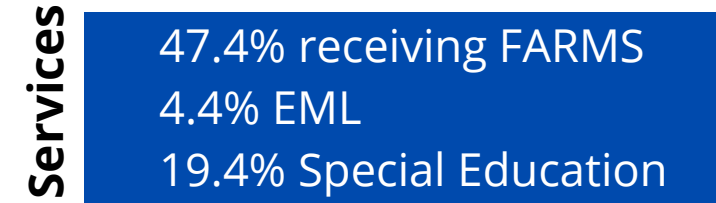
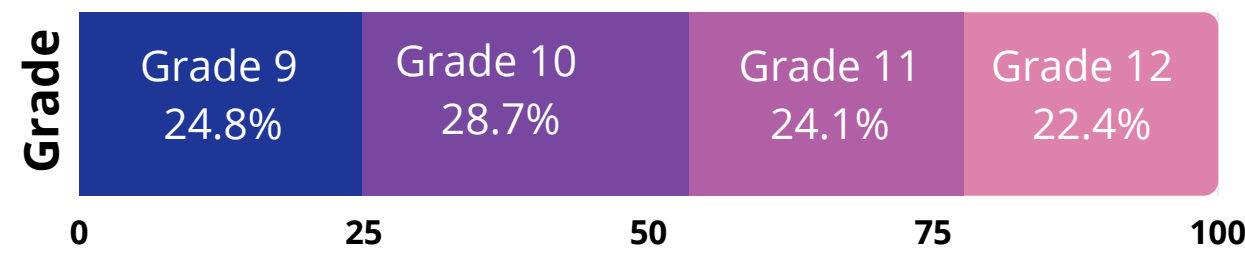
- About one-third of MVA students were enrolled in each middle school grade, similar to percentages in MCPS overall.
- A higher percentage of MVA middle school students were receiving FARMS compared with MCPS overall (47.4% vs. 40.4%), a slightly smaller percentage of MVA students were EMLs, and a slightly larger percentage of MVA students received special education services compared with the total MCPS middle school enrollment.
- The race/ethnicity of students enrolled in the middle school MVA differed from the MCPS population overall: larger percentages of Black or African American and percentages of Asian students, and smaller percentages of White and Hispanic/Latino students, made up the MVA compared with MCPS enrollment.



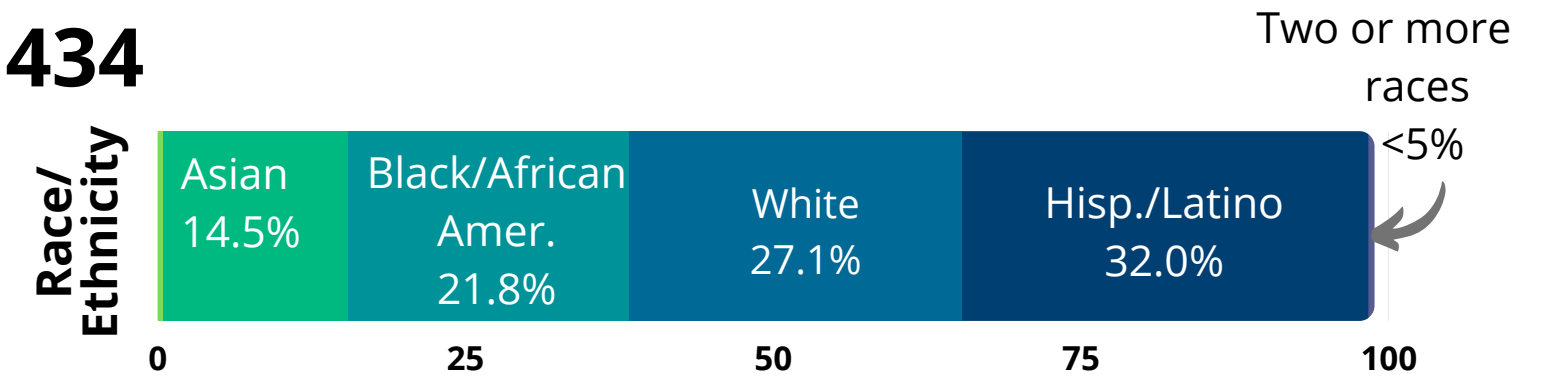
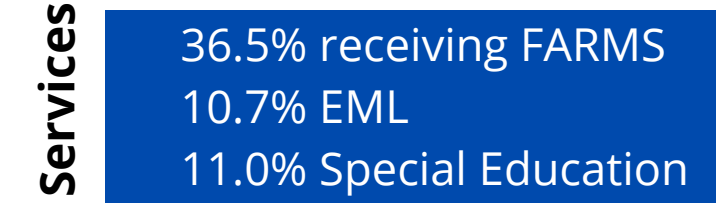
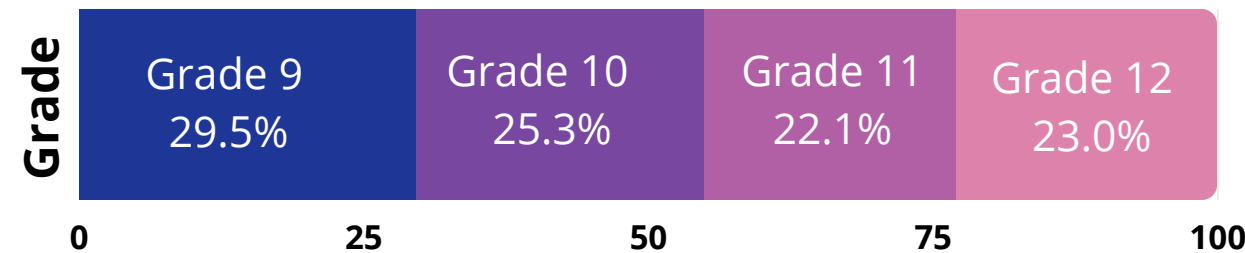
Characteristics of MVA Students Compared with all MCPS Students

High School

MVA High School students N = 742



MCPS High School students N = 50,434



- Percentages of students enrolled in each high school grade in MVA were similar to percentages in MCPS.
- A higher percentage of MVA high school students were receiving FARMS compared with MCPS overall (47.4% vs. 36.5%), a smaller percentage of MVA students were EMLs (4.4 % vs. 10.7%), and a more significant percentage of MVA students received special education services (19.4% vs. 11.0%) compared with the total MCPS high school enrollment.
- The race/ethnicity of students enrolled in the high school MVA differed from the MCPS population overall: larger percentages of Black or African American students and smaller percentages of White and Hispanic/Latino students made up the MVA compared with MCPS enrollment.



Question 1: What were the experiences and perceptions of stakeholders?



Surveys

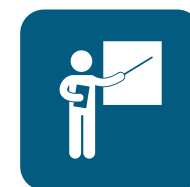
Respondent Breakdown



Students



Parents & Guardians



Teachers & Paraeducators

Total # of Surveys Distributed	1,674	2,134	208
Total # of Survey Responses	252	610	149
Survey Response Rate (%)	15.1%	28.6%	71.6%

Surveys were sent to **all families with students enrolled** in the Virtual Academy (N=2,134), **all instructional staff in Grades K-12** (N=208), including paraeducators, and **students in Grades 5-12** (N=1,674).

Caveat: Results should be interpreted with caution. The low response rates of parents/guardians and students may not allow the generalization of results to the broader population they represent.



Overall Grades by Topic Based on Stakeholder Responses



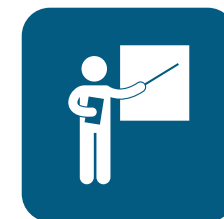
Surveys








Students
Grades 5 - 12



Parents & Guardians



Teachers & Paraeducators

	Students Grades 5 - 12	Parents & Guardians	Teachers & Paraeducators
Structure 	B (2.8)	A- (3.4)	A- (3.5)
Communication 	B+ (3.1)	B+ (3.3)	A- (3.5)
Instruction 	B+ (3.1)	B+ (3.3)	A- (3.6)
Engagement 	B (2.9)	A- (3.4)	B+ (3.2)
Well-Being 	B (2.8)	B (3.0)	A- (3.4)

On average, students, parents/guardians, teachers, and paraeducators responded positively to survey items across the topic areas. Survey items were designed for each stakeholder group, so specific items related to each topic area may have differed across stakeholder groups.

Teachers and paraeducators responded with higher ratings than the other two groups, particularly on communication, instruction, and well-being items.

Students had lower ratings than parents/guardians and teachers, particularly on items **relating to structure and engagement**.



Grading Methodology

Each awarded grade is based on calculating the mean score on a 4-point scale for each topic area. Mean scores were created by averaging the participants' responses across each question in the topic area. For example, students had 5 Instruction items; the mean score of those items produced the letter grade score.



Grading Scale

A	3.8 - 4.0	C+	2.1 - 2.3
A-	3.4 - 3.7	C	1.8 - 2.0
B+	3.1 - 3.3	C-	1.4 - 1.7
B	2.8 - 3.0		
B-	2.4 - 2.7		



Strengths, Opportunities for Enhancements with MVA



Surveys



Strengths

Benefits, most motivating activities



Opportunities

Suggestions for enhancement



Teachers & Paraeducators



Class discussion (76%)



One-on-one instruction or support (70%)

Small group work with peers (63%)



More opportunities for student-to-student interaction (64%)



More professional learning related to virtual teaching (32%)

More course offerings (30%)



Parents & Guardians



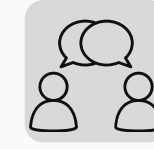
My child feels more comfortable in an online learning environment (74%)



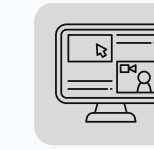
The instructional approach used by the VA teachers helps my child stay engaged in the lessons (57%)



The VA schedule allows my child to explore other interests and activities (57%)




Facilitate more student to student interactions (45%)



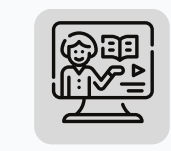
Facilitate more student to teacher interactions (40%)



Provide more feedback on completed assignments (35%)



**Students
Grades 5 - 12**

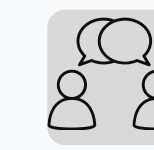


Teacher Demonstration (84%)

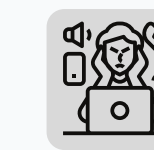
Self-directed learning (69%)



1:1 instruction with my teacher (50%)



Increase opportunities to communicate with other students (53%)



Make expectations for assignments more clear (37%)

Finding ways to avoiding distractions at home (37%)

Both **teachers and students reported that teacher demonstrations and 1:1 instruction** or support were among the most beneficial aspects of MVA. Stakeholders indicated their responses on a survey checklist.

Respondents in all three groups noted the importance of students communicating with each other; **opportunities for more student-to-student interaction was the top recommendation** for enhancing MVA from teachers and parents/guardians.



What were the experiences of stakeholders?



Focus Groups

112

Number of stakeholders who provided feedback during OSA focus groups.



**Teachers,
Paraeducators, Staff,
& Administrators**



**Parents &
Guardians**



Students

**Total # of Focus
Groups**

10

9

5

**Total # of
Participants**

53

40

19

To gather data on the experiences of staff, students, and families involved in the MVA, a series of virtual focus groups were held at the end of the 2021-2022 school year. Focus groups were conducted by school level. Staff focus groups included participation by all eight counselors.

Feedback was gathered from 24 focus groups comprised of 112 participants across key stakeholder groups. Overall, staff made up the largest number of participants at 47.7% (n=53), followed by parents/guardians at 35.1% (n=40) and students at 17.1% (n=19).



Focus Group Questions and Analysis

The following questions framed the focus group discussions

- 1 What are the benefits and strengths of the MVA?**
- 2 What are some opportunities for improvement in the MVA?**

Additional questions probed for information on relationships and students' social-emotional learning.



Responses from each group's transcripts were coded, analyzed, and compared to understand key themes in the feedback.



The themes presented here were prevalent across all stakeholder groups and were mentioned by 50% or more of participants in a stakeholder group. The main themes and related quotes are organized by the three areas of the MCPS strategic plan:

- Academic Excellence;
- Well-being and Family Engagement;
- Professional and Operational Excellence.



Focus Group Findings: Academic Excellence

Strengths	Opportunities for Improvement
MVA offered high-quality teachers and instruction. (parents/guardians, students)	Increase the course offerings at high school, offer hybrid options like taking courses at in-person schools, and increase the specials offering at elementary school level(e.g., STEM, foreign languages). (staff, parents/guardians, students)
Virtual learning increased the ease of delivering individualized instruction, differentiation, and accommodations for learning. (staff, parents/guardians)	Increase or provide more consistent support from staff during student support time or asynchronous learning. (parents/guardians, students)
	More thoughtful grouping of students in small groups to address students' strengths and weaknesses at the elementary level. (parents/guardians)

Many parents/guardians and students raved about the **high-quality instruction** happening in MVA. Some teachers received numerous mentions across focus groups. Elementary parents/guardians particularly highlighted the **quality of the specials teachers**. Many staff reported that online learning makes delivering **individualized instruction and differentiation easier**. All groups suggested **increasing the types of courses offered**, and some parents/guardians and students mentioned having **more hybrid options** where learning could occur at MVA and another school. Some secondary parents/guardians and students reported **staff not showing up for student learning time** or asked for more student support during the asynchronous time. /guardians of elementary students suggested more strategic use of small groups for learning.



Focus Group Findings: Academic Excellence



Stakeholder Comments

Facilitates Differentiation and Personalized Instruction

When you see a teacher who can quickly focus and say, 'Show me your screen,' that is detailed attention to my child. You don't get that as much in person; it's not always possible. (Parent)

The grouping, you can be very strategic with grouping using Zoom. (Staff)

I can identify students who need accommodations and support and deliver those without anyone feeling singled out, and it's easier for me to provide the accommodation this way. That's powerful. (Staff)

Quality Instruction

The specials teachers have been really outstanding. (Parent)

Instruction has gone above what I was expecting. I think that's a huge positive. (Parent)

My student has a great set of teachers who understand the technology, as well as the different subjects that they're teaching. (Parent)

I have a child who tested into a curriculum well above her grade level. They've customized her education for this class because - she's not ready to be around that age group. (Parent)

Increase Course Offerings

I really wanted to take Chinese and it wasn't offered. I ended up taking French and wasn't really into it. (Student)

I hope there could be a hybrid option going forward where you can do some virtual classes, and some in person. That would have worked well for me in 9th grade. (Student)

MVA doesn't offer courses a student needs for pathway or graduation. If they choose a different pathway, it can complicate the process. The world languages, we don't offer any of that ... for the seniors who came in, that created a huge problem. (Staff)

More Consistent Staff Support

Many of my teachers don't go to the student support in the morning or afternoon. (Student)

My child would show up for student support time and the teacher often wouldn't be there or log in late. (Parent)

There needs to be a little bit better focus on putting children together that can work on each other's strengths and weaknesses versus putting kids in a room randomly (Parent)



Focus Group Findings: Well-Being and Family Engagement

Strengths

Opportunities for Improvement

Provided health and physical safety, reducing stakeholders' worry and anxiety. (staff, parents/guardians, students)

Embed more opportunities for student-to-student interaction into the program and outside of the program. (staff, parents/guardians)

Increased connections between parent/guardians and schools, and teachers and students. (staff, parents/guardians, students)

Some students did not engage with instruction and activities, and others did not attend at all. (staff)

Provided equitable access to instruction for students with unique learning needs (staff, parents/guardians, students)

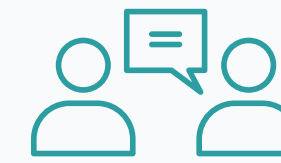
Asynchronous learning offered at elementary school does not engage students with important content (staff, parents/guardians, and students)

Increased student agency, independence and responsibility for learning (staff, parents/guardians, students)

All groups reported that MVA provided a place of safety for health and physical security and highlighted how the virtual environment created **a strong connection between staff and families** and students and teachers. All groups highlighted how MVA provided equitable access to learning for students with unique learning needs where reluctant students or students with diverse learning profiles feel more comfortable engaging in lessons and activities. They also reported that MVA creates increases independence and agency for some students. Families appreciated MVA's efforts to create more social opportunities during the semester but also asked that more social-emotional opportunities be embedded into the curriculum and school day. All groups said that elementary asynchronous learning did not facilitate engagement with meaningful content. Almost all staff reported issues with some students attending online classes but not engaging in classroom lessons and activities.



Focus Group Findings: Well-Being and Family Engagement



Stakeholder Comments

Health and Physical Safety

I don't want to underestimate the safety due to health reasons. We think COVID but we have students going through chemo, on the organ transplant list, in wheelchairs, with feeding tubes and kids with long COVID. (Staff)

I have a special needs child who wasn't generally sick for two years. It was amazing to not have to constantly be taking off work, not constantly worrying is a relief. (Parent)

We had one student constantly being sent home because of behaviors and elopement. His mom was having to come get him constantly we don't have that issue anymore and he's thriving academically. (Staff)

Equitable Access to Instruction

Students will participate because can use the chat. They feel more comfortable asking questions. (Staff)

My child is more of an introvert. And so, this platform works very well for him to engage with the class and the teacher. (Parent)

.For my child with a sensory issue just simply being able to turn the volume down is huge. They can still be listening to instruction. Being able to take a break, not having to go to a counselor's office,. They do not feel like they are missing things. (Parent)

I have noticed that kids who are just the quiet kids, the shy kids who are hesitant to speak up or ask for help or take a risk, I see them speak up and take risks, I'm seeing their growth in engagement that I think is this unique environment. (Staff)

Increased Connection with Student and Teacher

I've gotten to know the teachers more online. I feel like I don't get to communicate with them as much in my in-person school because they're swamped, but when I'm online, they have office hours where I can talk to the teachers. (Student)

They are being taught to their person not their disability. In-person, the teacher already has a preconceived idea of what my son can or can't do because of his disability. Very rarely do they ask him what he can do. MVA has had a very positive effect on him. He's specifically told me they're teaching me, not my disability, which is a huge thing for someone with a disability. (Parent)

Note: Strengths are in blue quote boxes; opportunities for improvement are in red quote boxes.

Asynchronous Instruction Not Engaging

The kids were not engaged with asynchronous, many of them were not completing work. (Staff)

The asynchronous is mostly just recorded slides of teachers, and it's not really that helpful. You can't ask questions and get answers. (Student)

I work from a home environment, and I could ensure they were on point [during asynchronous]. It was really hard not having directed instruction. For somebody with special needs, that's the only way it worked out. (Parent)



Focus Group Findings: Well-Being and Family Engagement



Stakeholder Comments

Increases Student Independence

“I don't need to help my kid anymore with it; she does everything herself now. Every once in a while, I just have to remind her: 'Oh, you know it's music time' or something like that. It's been pretty impressive to me. It's allowed my daughter to gain even more independence in many ways. (Parent)”

“This has [led to] some growth in the level of independence of my children. They can do stuff that I wouldn't do at that age, one is an elementary second grader, and the other is an eighth grader. They are very independent. (Parent)”

Increased Connection with Families

“Many parents can log in from home while cooking dinner or finishing things. They don't have to drive across the county to meet up in person. So we've significantly increased our parent involvement in those kinds of events. (Staff)”

“The partnership level is so much more than what you would experience if you sent your kid in person. (Parent)”

Note: Strengths are in blue quote boxes; opportunities for improvement are in red quote boxes.

Student's not engaging with online instruction, not attending

“They've realized quickly that they can come to homeroom, they don't need to come to math, literacy or specials, but if there's a record that they showed up in homeroom, they're counted as being present. (Staff)”

“It's mostly kids who are either not logging in at all, or they log in, and they're not responsive, They're logging in and their name shows up, but then they're going off to do something else and they're getting attendance credit, but not engaging. (Staff)”

“I have some students enrolled all year and I've never seen them in class! (Staff)”

Need more student to student interactions

“I hope that next year, there could be a lot more student mental health embedded in the classroom and activities. Students crave connection. She just wants to share and connect with them every day; however, she does not get that with the number of students in the class. (Parent)”

“I wish there were more [meetups with other students] because you know they work so well together in class, and they blossomed when they met up in person. My elementary group had a meetup. It was fantastic for my child (Parent)”



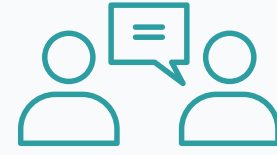
Focus Group Findings: Professional and Operational Excellence

Strengths	Opportunities for Improvement
MVA leadership was responsive to families and staff. (staff, parents/guardians)	Communication with families using current technology could have been more efficient and effective. Stakeholders reported parents received too many emails and they had to look for information in too many places. Also, grades weren't displayed in a timely manner to view. Staff reported that e-mailing parents/guardians via Synergy didn't efficiently address issues like attendance. (parents/guardians, staff, students)
School staff was responsive to parent and student communications. (staff, students)	Notification about in-person testing at the home schools was confusing, late, inaccurate and created disruption for MVA classes (e.g., testing schedules at home schools and attendance issues). (parents/guardians, staff, students)
	Increase other MCPS schools' understanding of how MVA operates and what it offers, and identify effective ways of communicating with stakeholders about courses and services available at MVA. (staff, parent/guardians)

Numerous groups gave accolades to **MVA leadership** for being adaptable to rapidly changing circumstances and for their **responsiveness to families and staff**. Many parents/guardians and students reported that the **staff was responsive to questions and issues**. When asked what could be improved, staff and parent groups said that the technology for communicating with parents/guardians made communication more complex and confusing. Parents/guardians received too many emails, contacting parents/guardians via Synergy did not promptly address attendance issues, and grades were not promptly displayed in the system.



Focus Group Findings: Professional and Operational Excellence



Stakeholder Comments

Responsive Communication

“I feel valued; I feel respected. I genuinely feel like the administrators care about me. (Staff)”

“If we had an issue, the staff at headquarters were very responsive; whether it was the computer, a schedule issue, or something else. (Parent/Guardian)”

“I feel like any time I reach out to the administration for help, within 24 hours, I get a response. They will meet with me and help me with any issues I need. They are very responsive to what we need. (Staff)”

“It's their vision. The way they work things to make it accessible for all the staff and students and make it clear for everybody to understand is fantastic. (Staff)”

Too Many Emails

“Parents start getting tons and tons of emails, and it's tough to weed through what's a general announcement, what's specific to their child, and what's an attendance thing. (Staff)”

“So it was a lot of emails. I was getting emails from each of their home schools and MVA. It was serious enough that I could have papered my entire wall with them if I printed them out. (Parent/Guardian)”

Other Technology Issues

“Teachers still log correspondence in Synergy, but they're sending direct emails from Outlook because that method has a greater success rate. Synergy is an excellent platform for in-person learning, but in terms of communication, Synergy becomes very limiting. (Staff)”

Current Grades Not Displaying

“We were dealing with some consistent challenges like seniors who can't access their grades. That's a problem. (Staff)”

“If synchronizing the parent view thing could be faster or easier because I think some teachers were having trouble getting the grades to synch. I felt terrible for them. I would get messages at all hours of the day and night, so you could see that they were trying hard. (Parent/Guardian)”

“There's no way for me as an elementary school teacher to use the platform we've purchased as a county to record that a student is not attending my class; most of my time is spent emailing parents through Synergy. (Staff)”

Unclear communication about testing at the home school

“Students having to go in person for state testing was VERY disruptive. For the whole month of May, I have had 5-10 students absent each day for testing. These students then had to get caught up on their missed classes. (Staff)”

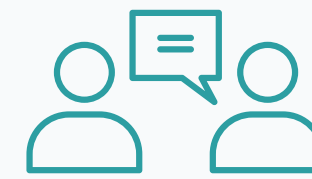
“I have one daughter who went and took the wrong test. I had another daughter who went on the wrong day because of poor communication. It was just three children in three different schools. It was rough. (Parent/Guardian)”



Focus Group Findings: Professional and Operational Excellence

Strengths	Opportunities for Improvement
<p>Stakeholders believe there is increased flexibility and efficiency for teaching and learning when it happens in a virtual environment. (staff, parents/guardians, students)</p>	<p>Level up the technology infrastructure to maximize the functionality and effectiveness of MVA. This includes digitization of curriculum., faster approval time for additional applications, and better computer hardware. (staff, parents/guardians, students)</p>
	<p>Having a student enrolled in MVA and their home school creates multiple issues with sharing student information between schools and impacts the delivery of instruction and services. These include obtaining information for registering students in MVA, sharing information about special education students, gathering information from student files, and connecting with PPWs and school psychologists. (staff, parents/guardians)</p>
	<p>The enrollment process needs to be adapted and consistent between in-person schools and the MVA program. The rolling entry of students throughout the year into MVA created a large influx of students after the 1st semester that was burdensome for staff. (staff)</p>

A major strength of the MVA reported by all groups is that the online learning environment provides flexibility in how and when students learn. Students can review recorded lessons outside class and continue learning during out-of-class times. **It frees up time to pursue other interests and courses outside of MVA and creates more efficiency for families regarding travel time in the car and logistics.** All stakeholders reported the **need to level up the technology**, including the application approval process, digitizing the curriculum, and having better hardware. They also emphasized that the enrollment of students at both MVA and their home school creates a diffuse communication network that increases the complexity of the work. Staff asked for increased understanding from other schools regarding MVA's educational program and services to serve students best. Staff spoke passionately about problems with having rolling enrollment and its impact on instruction and workload.



Online learning provides flexibility and efficiency for families

Level up technology and related approval processes

Rolling enrollment throughout the year create challenges

Enrollment at MVA and homeschool creates information sharing challenges

“ I can work on assignments at my own pace but then have time for other activities. I took a Japanese class I’ve always wanted to take. (Student) ”

“ We would need a faster program of vetting our online tools. It’s just like approving a textbook it’s painfully long. (Staff) ”

“ With three weeks [left in] school, I’ve had five kids enroll, and I had a senior enroll yesterday [end of May]. The schools need to know that just because the kids are failing at in-person school, they might not do any better online. We don’t need to be a dumping ground. (Staff) ”

“ The diffusion of the network across schools makes it difficult. It’s impossible to develop staff relationships with PPW/psychologists. We have to deal with PPW at each school for issues and information. (Staff) ”

“ The classes are recorded . If my child is unable to attend, they can just listen to the recording and it can be repeated as much as they want. (Parent/Guardian) ”

“ We need to, as a school system, think about the apps that are free or very cheap for school systems. Tinker is one of them. It teaches programming. There’s also Minecraft for kids, and part of it is educational. (Parent/Guardian) ”

“ It [rolling enrollment] creates challenges for us in terms of continuity of instruction and continuity of access to student data; It has an impact people don’t see. Families need to have options, but how do we do it so that it doesn’t impact the staff and their ability to meet kids’ needs? (Staff) ”

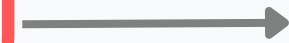
“ The speech provider [private] didn’t have access to the system. Because the homeschool has to represent the child, those [private] service providers couldn’t be in the IEP meetings; Thankfully, we were able to coordinate everybody before the IEP meeting. it was kind of wonky, just very complex. (Parent/Guardian) ”

“ It brings flexibility to our home life balance. I can take him out for an appointment in the middle of the day and it’s interrupting the school day as much. (Parent/Guardian) ”

“ If MCPS wants us to be an innovative virtual program then we need technology access to do so. We need 21st century technology. For example, getting approval for access to apps and streamlining online resources to be able to use with MCPS permission. (Staff) ”

“ I have been converting every single lesson into a pear deck page by page so that I can see them and what they’re doing in real-time, and that was the only way I could ensure that they were staying on task and engaged. It takes hours and hours. (Staff) ”

“ Synergy functions well for brick-and-mortar schools, but it needed to be configured to imagine a design where students are enrolled in two schools simultaneously. Information from both schools needs to talk to each other. It needs to have some facility in accessing information, so if I need to see a student’s grades because the student transferred to our program with three days left in the marking period, there are a lot of hoops that we need to jump through to be able to see those grades. It’s not that we can’t do it. It’s just not user-friendly or efficient. (Staff) ”



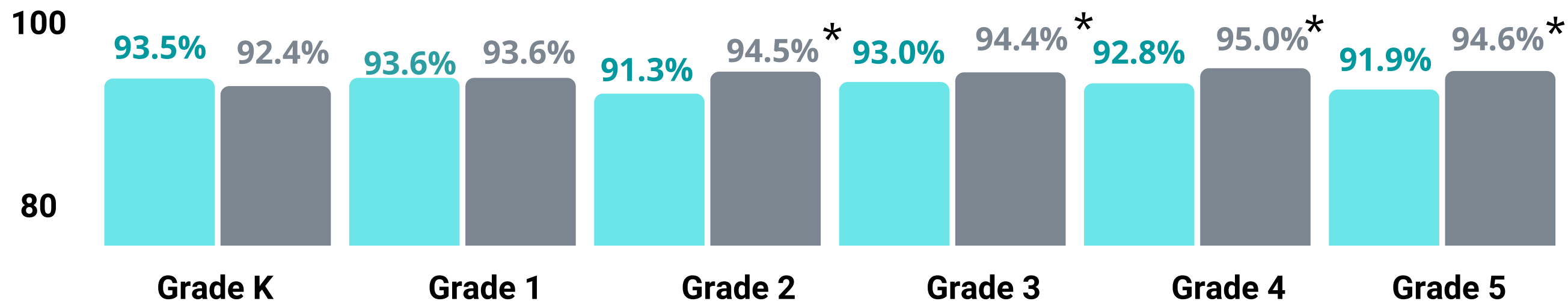


Question 2: How did the attendance rate of MVA students compare to similar students enrolled in in-person schools?

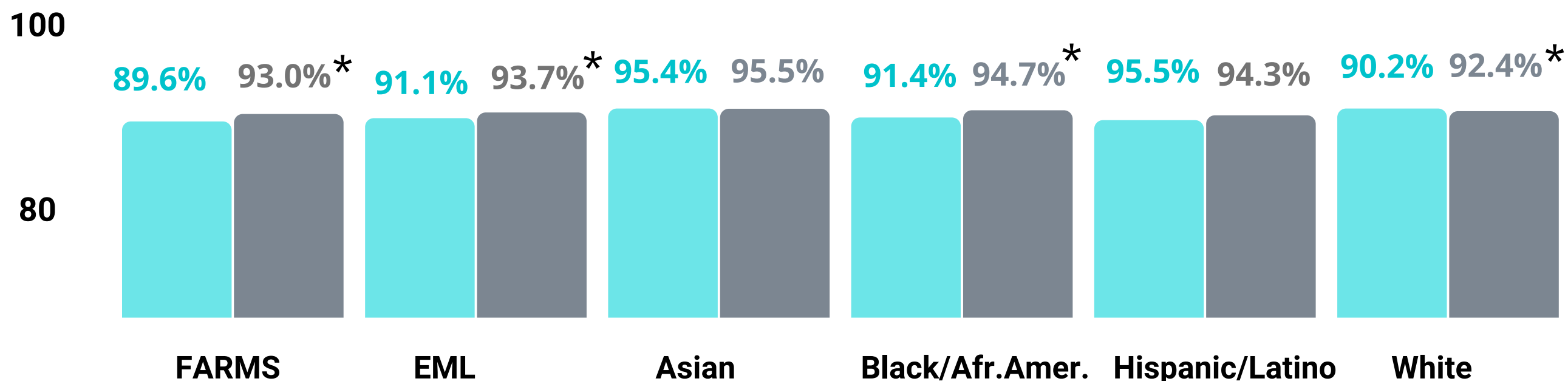
Elementary School

Virtual Academy ● Comparison ●

Elementary attendance by grade



Elementary attendance by student groups



Across all grades, the overall difference in attendance rate was 1.4% (MVA=92.7% and in-person=94.1%). In Grades 2, 3, 4, and 5, **students in in-person schools had significantly higher attendance rates than students in Virtual Academy.**

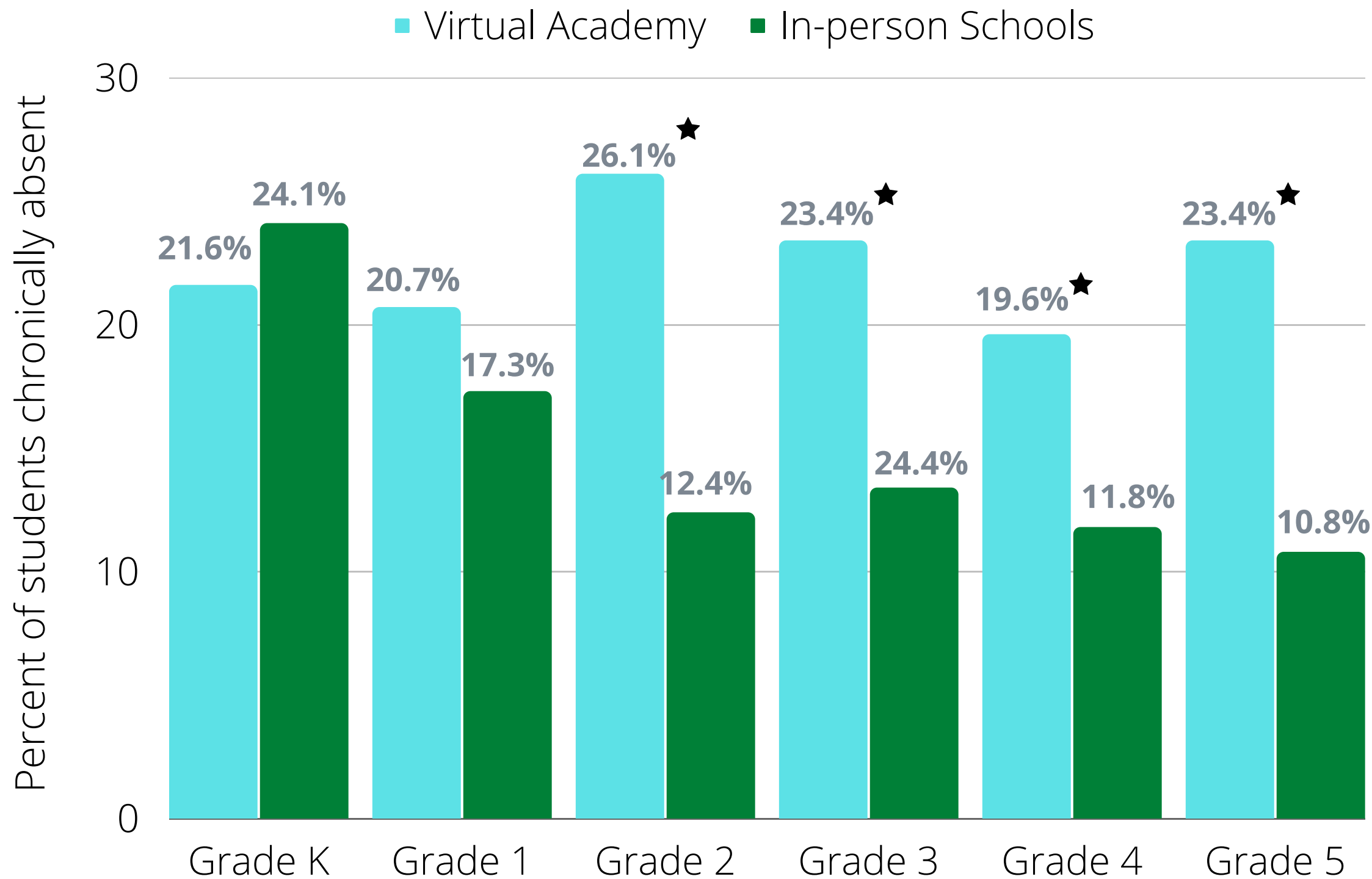
Among students who received FARMS, EML, Black/African American students, Asian and White students, attendance rates were higher for the in-person comparison group than for MVA students.

*Statistically significant difference, MVA compared with in-person, ANCOVA, p<.05



Chronic absenteeism among MVA students and similar students enrolled in in-person schools

Elementary School



Further analysis of elementary attendance revealed higher chronic absenteeism rates among Virtual Academy students compared with similar students at in-person schools.

Significantly higher percentages of students attending Virtual Academy were chronically absent (absent more than 10% of days enrolled) compared with students attending in-person schools in Grades 2, 3, 4, and 5.

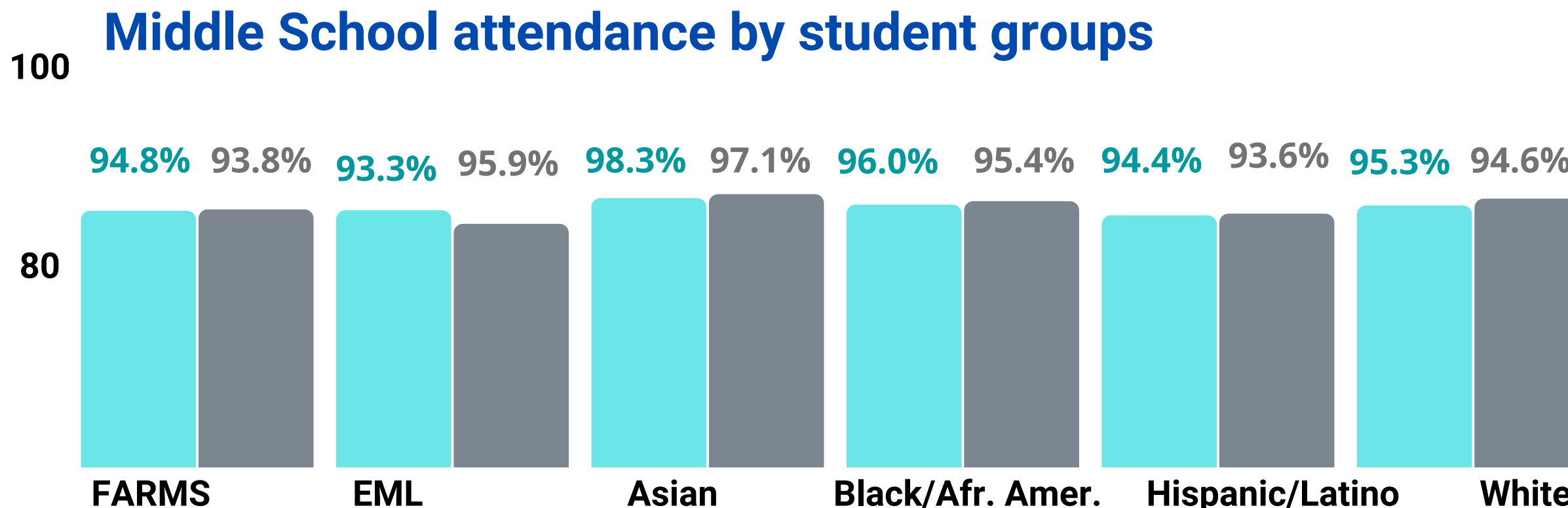
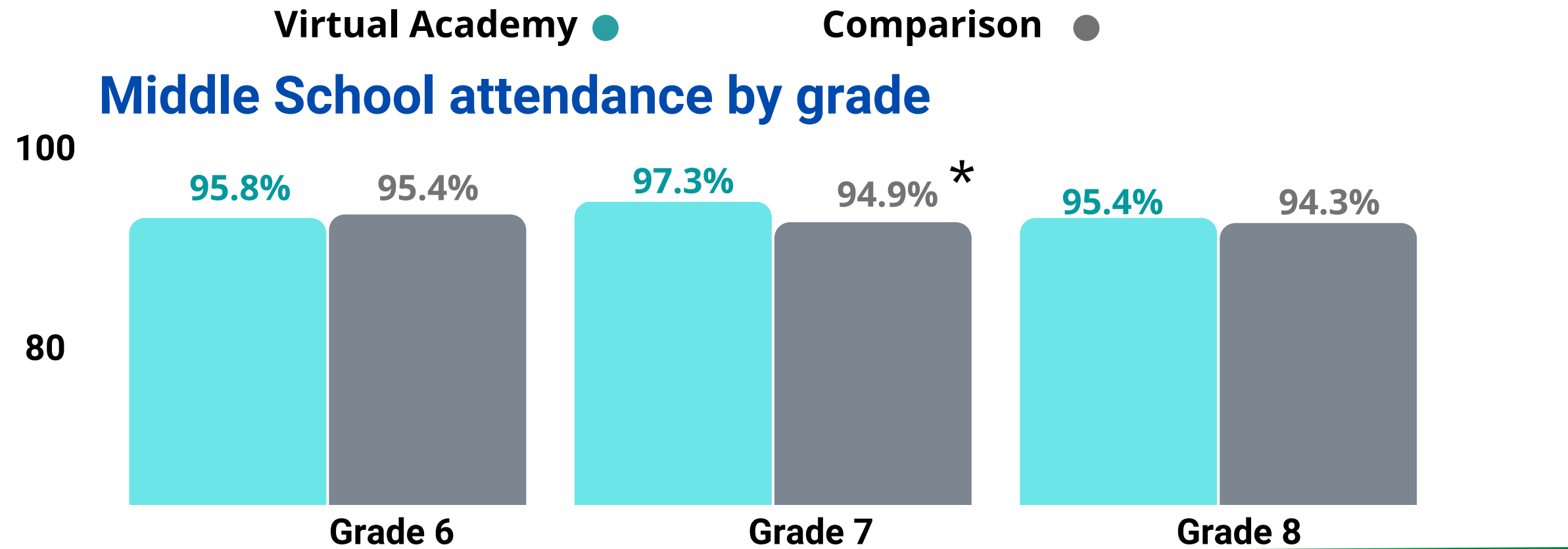
Within student service groups and race/ethnicity, significantly higher percentages of chronic absenteeism were found among the MVA students compared to in-person students receiving FARMS, EML students, Black or African American, and Hispanic/Latino students.

*Statistically significant difference, MVA compared with in-person, ANCOVA, $p < .05$



Attendance level of MVA students compared with that of similar students enrolled in in-person schools

Middle School



The overall attendance rate difference between MVA (96.2%) and in-person learning (94.9%) environments was small and insignificant, indicating that attendance was comparable between the two groups.

In Grade 7, MVA students had a significantly higher attendance rate than comparison students in in-person schools; although the difference was very small (2.4 percentage points).

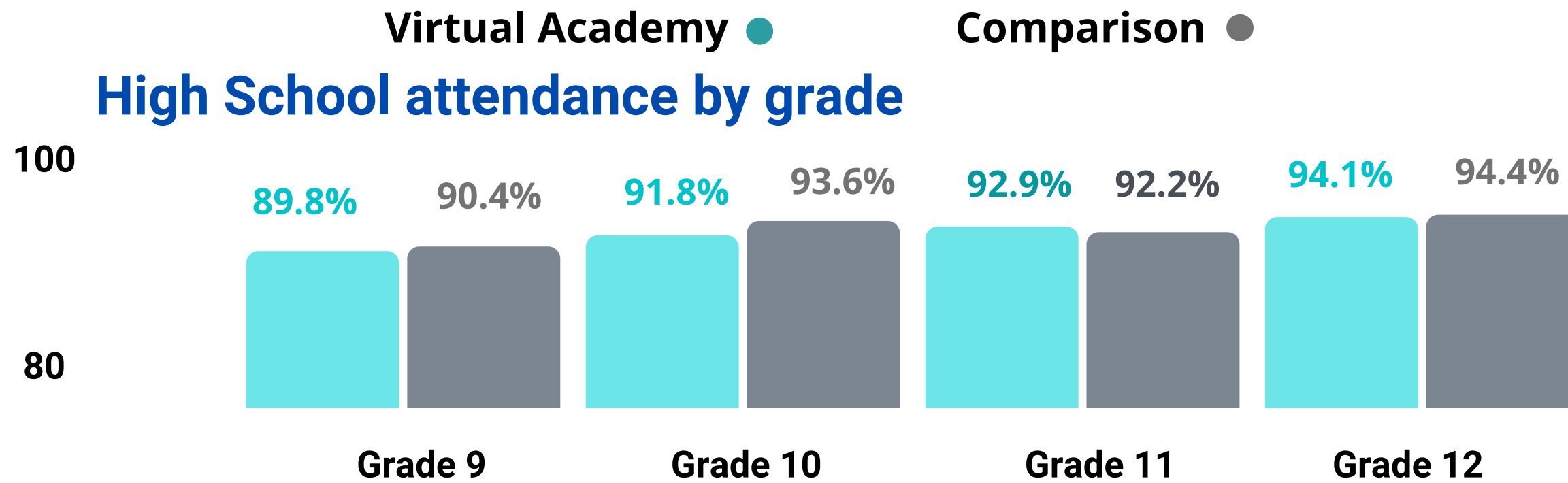
Attendance rates within student service and race/ethnicity groups were similar for Virtual Academy students and students attending in-person schools. No statistically significant differences were found between the two groups in any of the student groups.

*Statistically significant difference, MVA compared with in-person, ANCOVA, $p < .05$



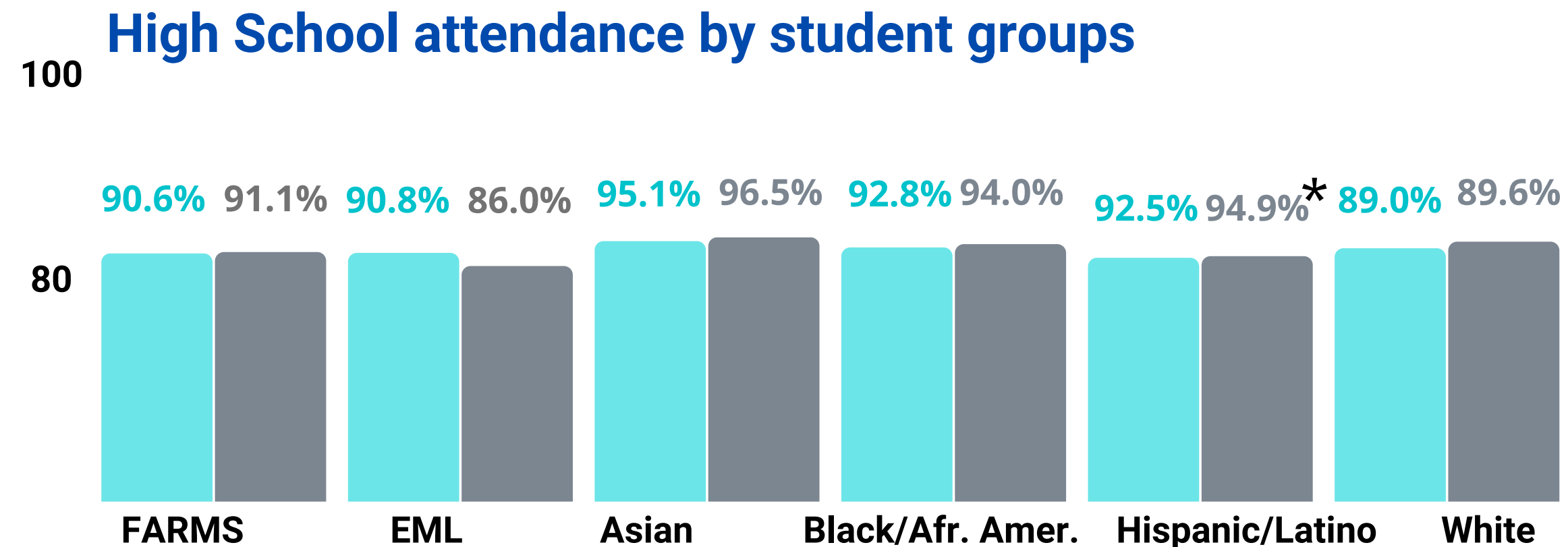
Attendance level of MVA students compared with that of similar students enrolled in in-person schools

High School



The overall attendance difference between MVA (92.2%) and in-person learning environments (92.7%) was trivial, indicating that attendance was comparable between the two groups.

Analysis of Grades 9 through 12 showed similar results.



Attendance rates within student service and race/ethnicity groups were similar for MVA students and in-person students. Only among Hispanic/Latino students was the difference in attendance rates significantly higher for students attending in-person schools compared with the rate for the MVA students by 2.4 percentage points.

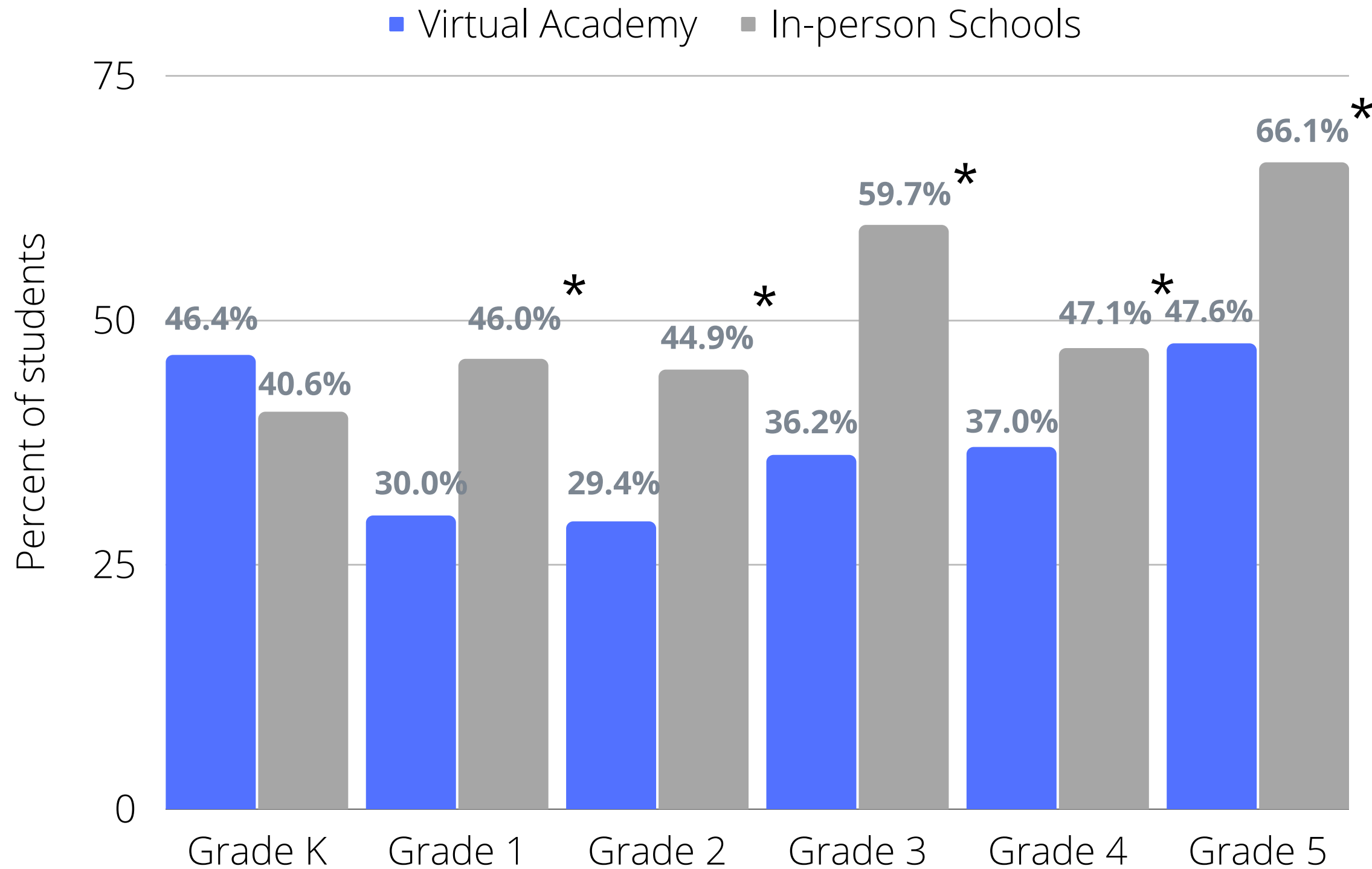
* Statistically significant difference, MVA compared with in-person, ANCOVA, p<.05



Question 3: How did the **math** performance of MVA students compare with that of similar students enrolled in in-person schools?

Elementary School

Percent of students meeting Fall to Spring projected growth for math



Students in Grades 1 through 5 attending MVA were significantly less likely than their in-person peers to meet their projected growth in math in Spring 2022.

Within student service groups, MVA students receiving FARMS were significantly less likely than their in-person peers to meet their projected growth in math in Spring 2022, but EML students did not differ between the two groups. MVA students in all race/ethnicity groups except white were significantly less likely to meet projected math growth compared with their in-person peers.

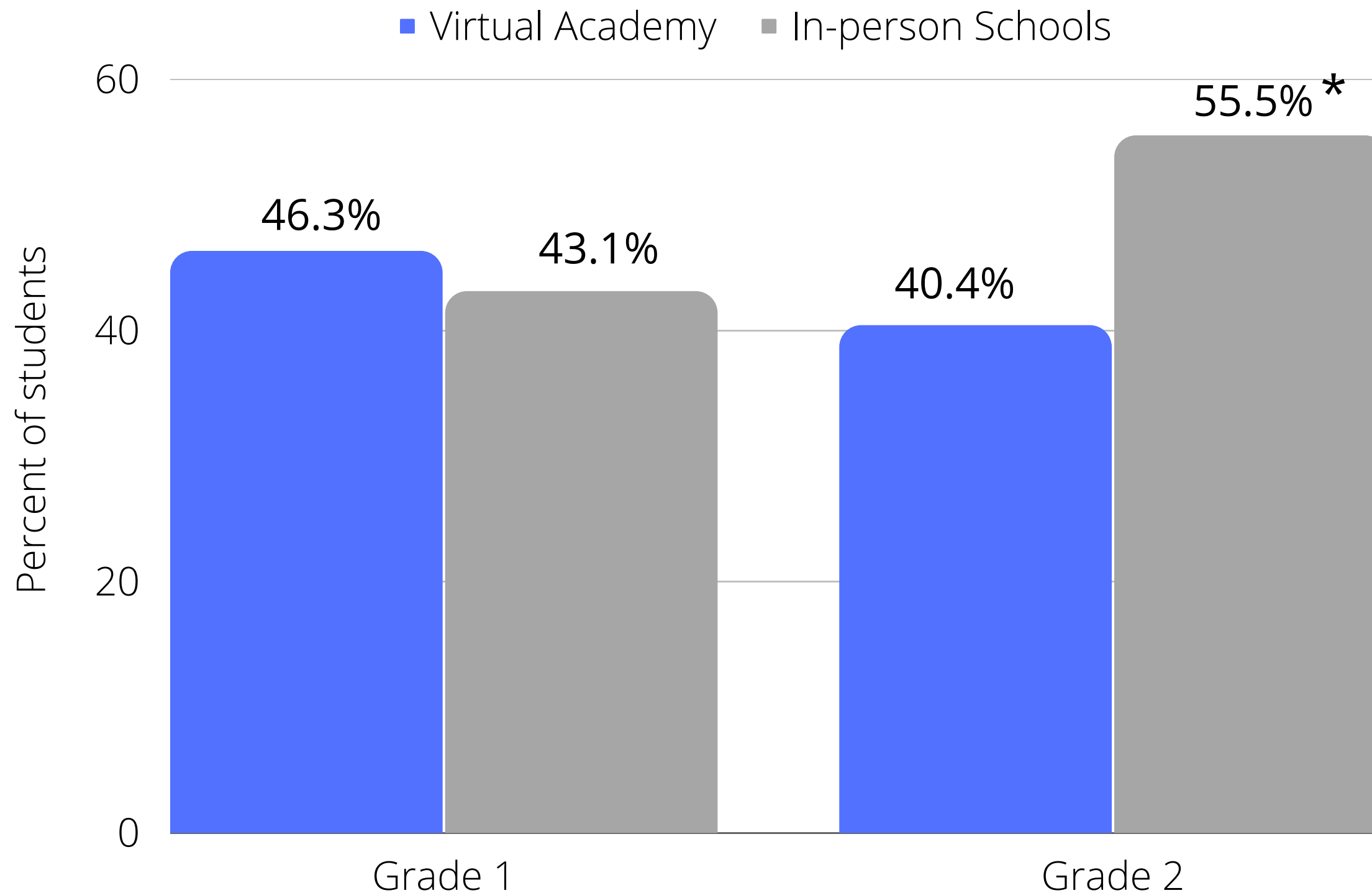
* Statistically significant difference, MVA compared with in-person, ANCOVA, $p < .05$



Question 3: How did the **reading** performance in **Grades 1 and 2** of MVA students compare with that of similar students enrolled in in-person schools?

Elementary School

Percent of students meeting expectation, Grades 1 & 2



In Grade 2, in-person students were significantly more likely to meet the expectation than Virtual Academy students.

Analysis of expected level of performance by service groups and race/ethnicity revealed no significant differences in any of the student groups.

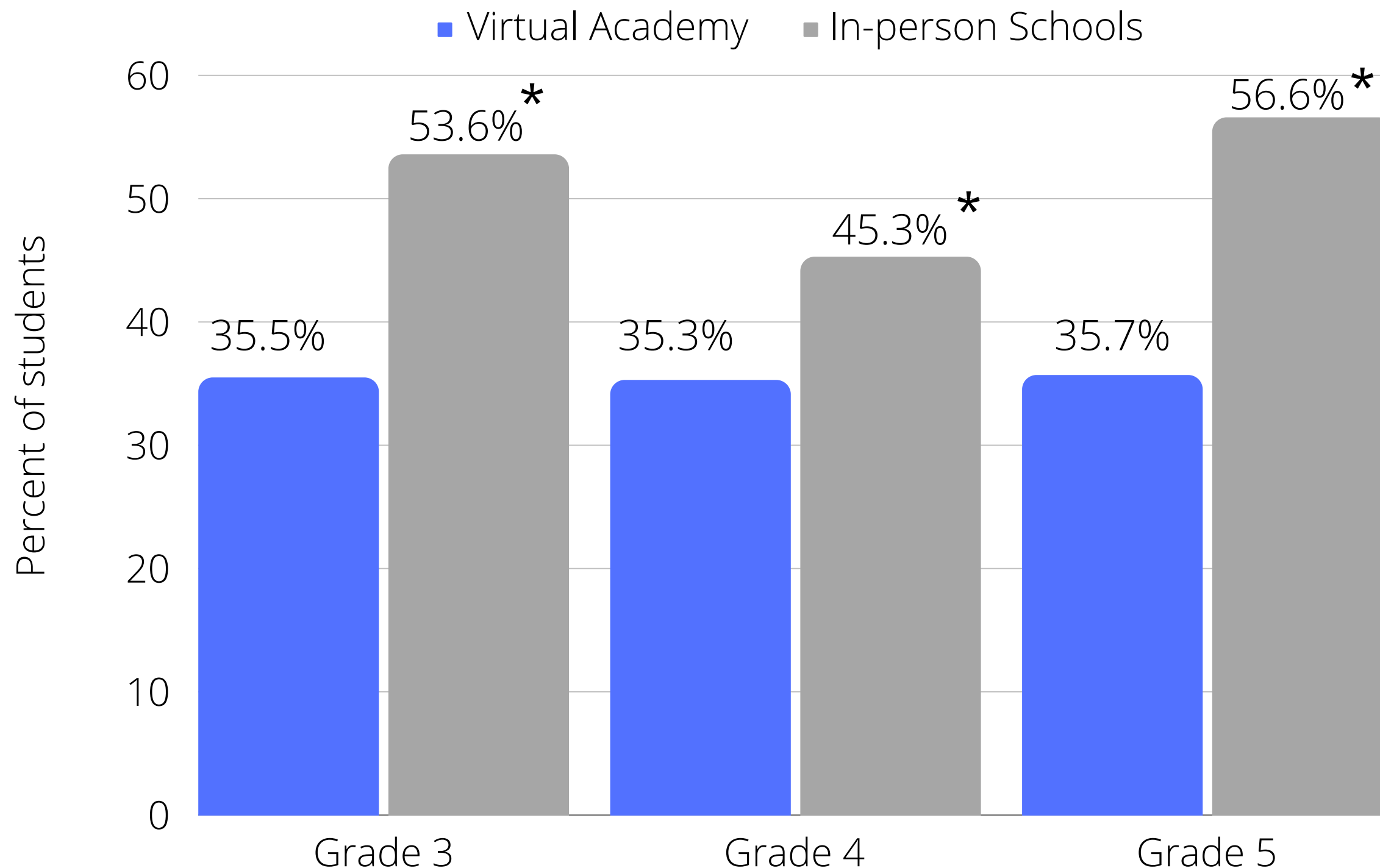
* Statistically significant difference, MVA compared with in-person, ANCOVA, $p < .05$



Reading performance in Grades 3 through 5 for MVA students compared with similar students enrolled in in-person schools

Elementary School

Percent of students meeting projected reading growth, Fall to Spring



*Statistically significant difference, MVA compared with in-person, ANCOVA, $p < .05$

Students attending Virtual Academy in Grades 3, 4, and 5 were significantly less likely than their in-person peers to meet their projected growth in reading in Spring 2022.

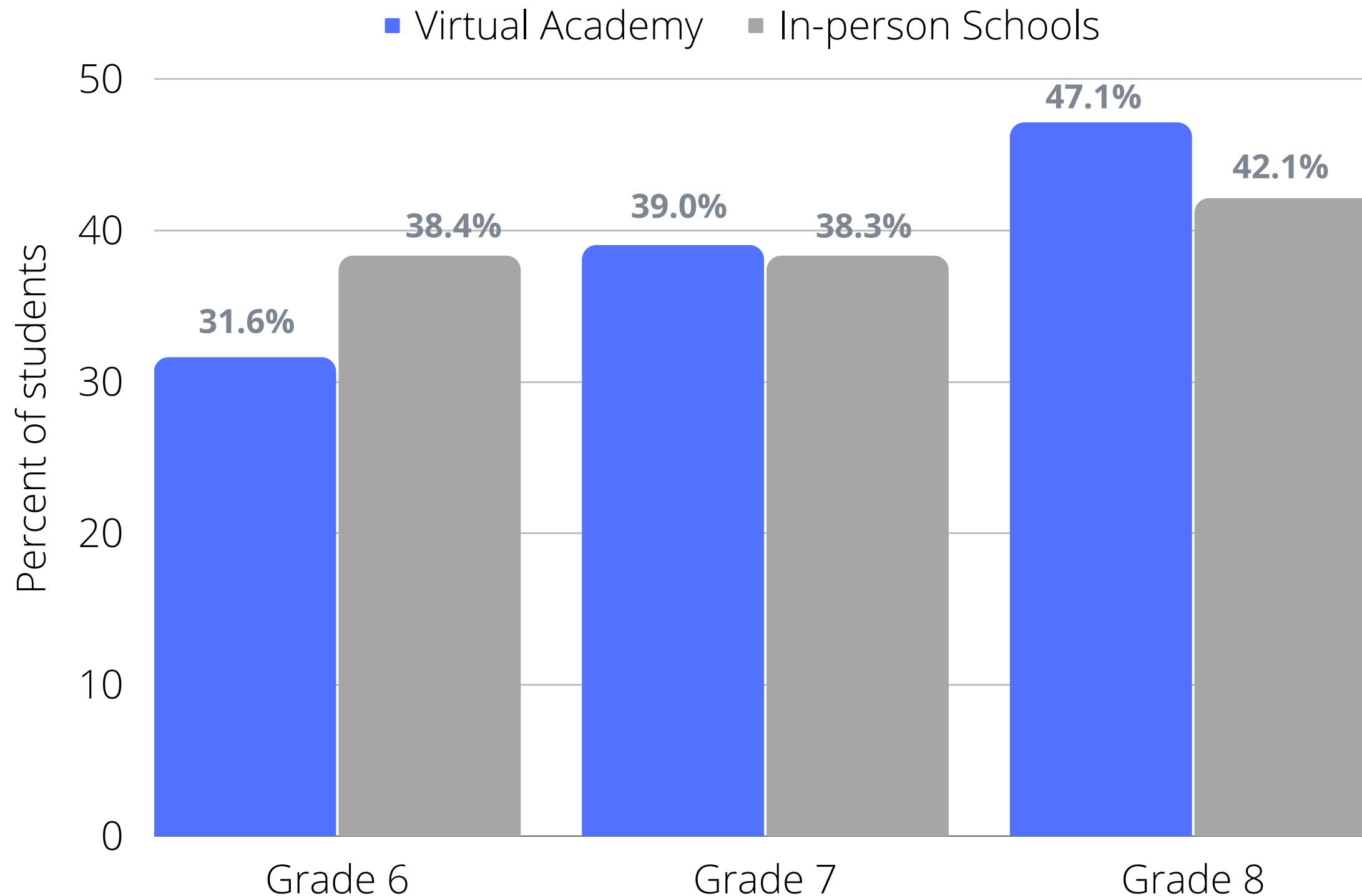
Within student service groups, MVA students receiving FARMS were significantly less likely than their in-person peers to meet their projected growth in reading in Spring 2022, but EMLs did not differ between the two groups. Among Asian, Black or African American, White, and Hispanic/Latino students, MVA students were significantly less likely to meet projected reading growth compared with their in-person peers.



Math performance of MVA students compared with that of similar students enrolled in in-person schools

Middle School

Percent of students meeting projected math growth, Fall to Spring



The apparent differences across grades in Spring math performance between MVA students and in-person students were not statistically significant.

Analysis by service groups and race/ethnicity revealed no significant differences in any student groups except among Asian students, where in-person students had a significantly higher percentage of meeting their projected growth in math compared with their MVA peers.

*EMLs were excluded due to low numbers.

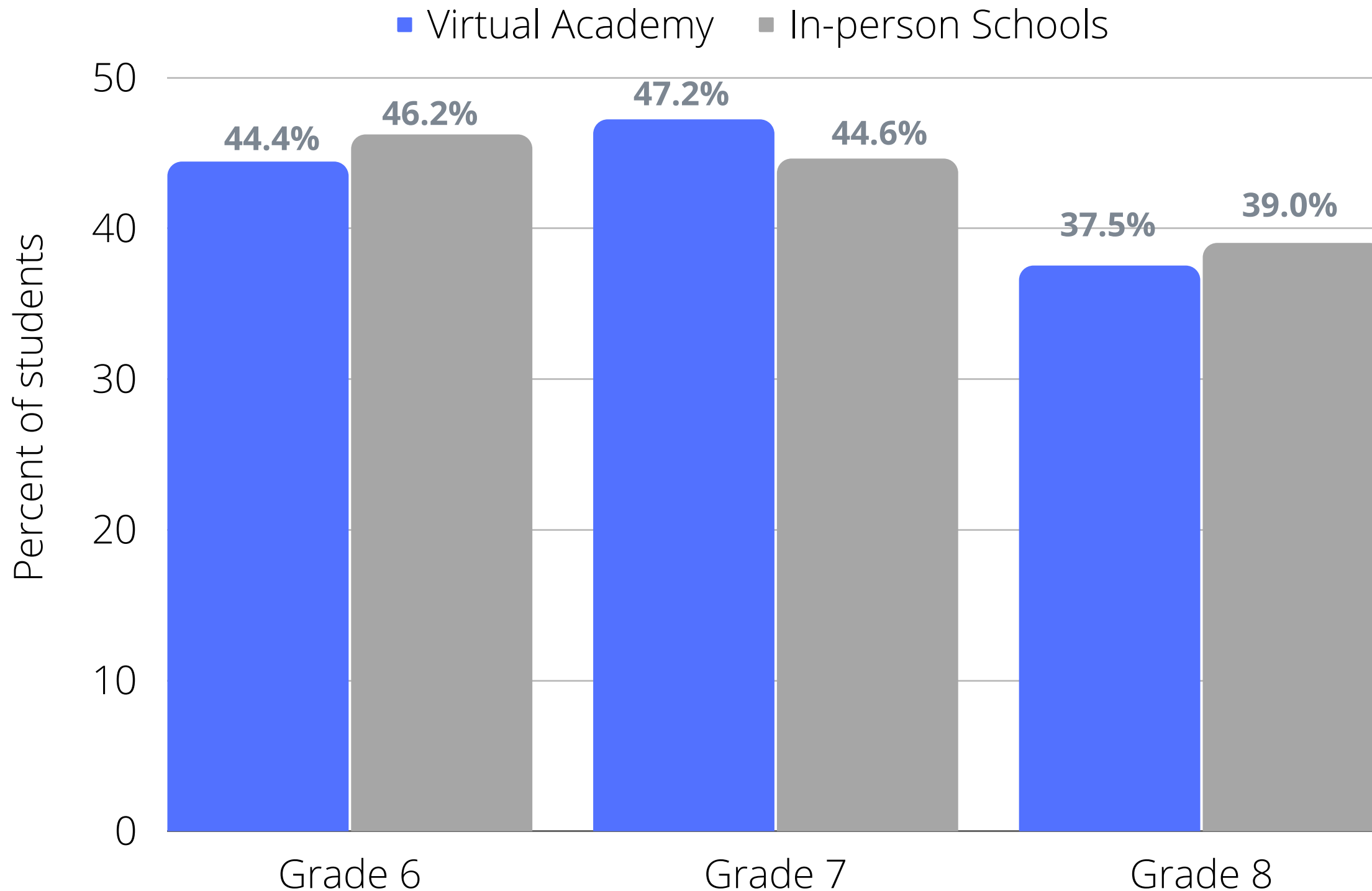
A larger percentage of MVA students compared with in-person students did not have MAP-M scores (11.2% MVA and 4.3% in-person). If students who don't test were likely to underperform, results could overstate the performance of MVA students.



Reading performance of MVA students compared with that of similar students enrolled in in-person schools

Middle School

Percent of students meeting projected reading growth, Fall to Spring



Analysis of reading performance by grade, service groups, and race/ethnicity also revealed no significant differences in any of the groups. EMLs were excluded because there were too few students for analysis.

Among middle school students, a larger percentage of MVA students than in-person students did not have MAP-R test scores: 24.4% of MVA students compared with 4.1% of their in-person peers did not have MAP-R scores.

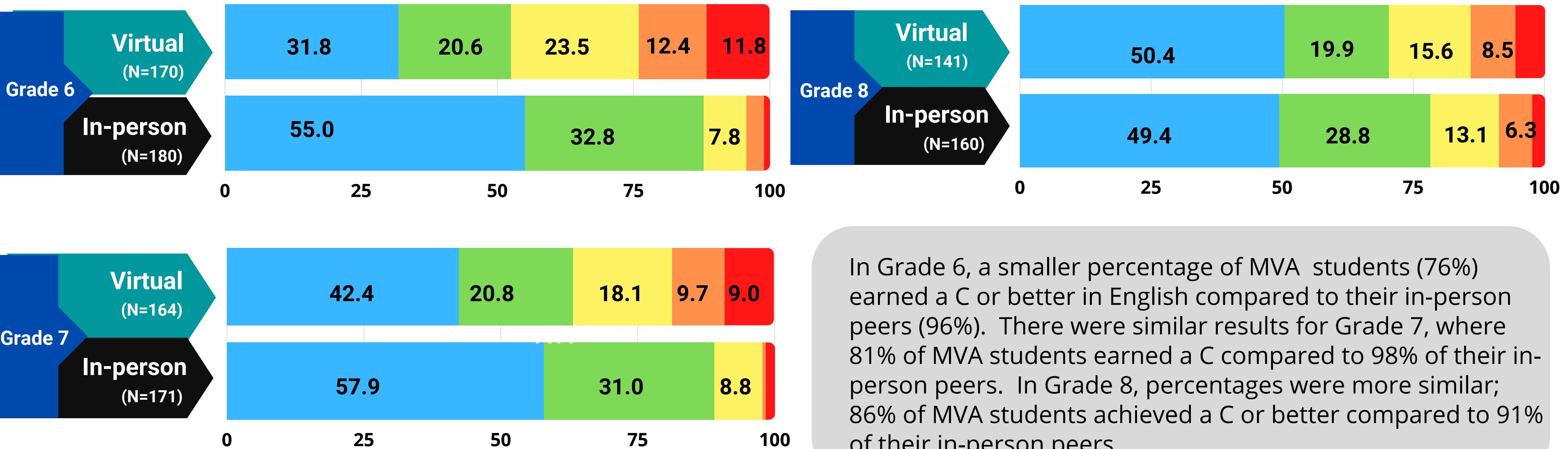
If students who don't test were likely to underperform, results can overstate the performance of MVA students.



Question 3: How did MVA students' performance in literacy compare to similar students attending in-person schools?

Middle School

End of Year Middle School English Report Card Grades: Virtual Academy vs. In-Person Schools



In Grade 6, a smaller percentage of MVA students (76%) earned a C or better in English compared to their in-person peers (96%). There were similar results for Grade 7, where 81% of MVA students earned a C compared to 98% of their in-person peers. In Grade 8, percentages were more similar; 86% of MVA students achieved a C or better compared to 91% of their in-person peers.

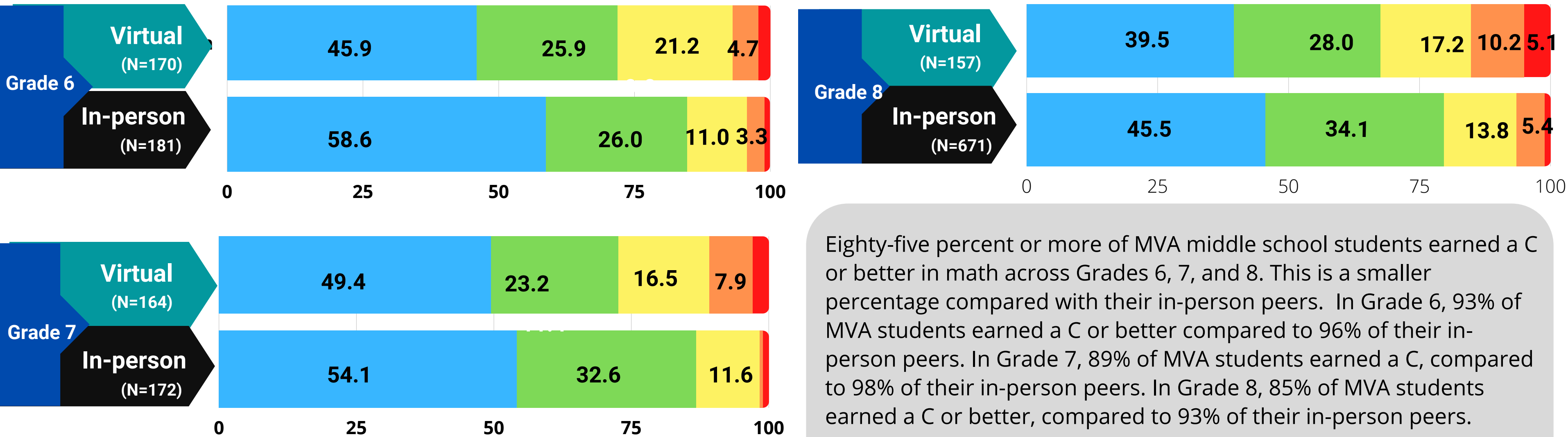
● % of students earning A ● % of students earning B ● % of students earning C ● % of students earning D ● % of students earning E



MVA students' performance in math compared to performance of similar students attending in-person schools

Middle School

End of Year Middle School Math Report Card Grades: Virtual Academy vs. In-Person Schools



Eighty-five percent or more of MVA middle school students earned a C or better in math across Grades 6, 7, and 8. This is a smaller percentage compared with their in-person peers. In Grade 6, 93% of MVA students earned a C or better compared to 96% of their in-person peers. In Grade 7, 89% of MVA students earned a C, compared to 98% of their in-person peers. In Grade 8, 85% of MVA students earned a C or better, compared to 93% of their in-person peers.

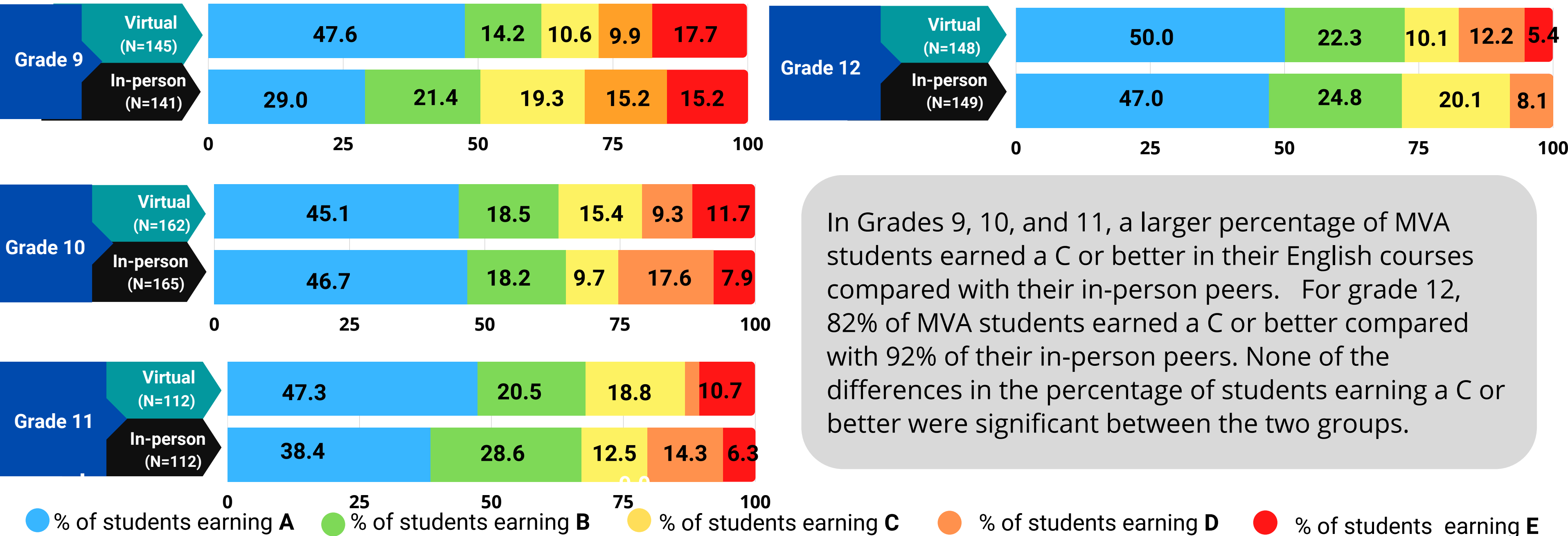
● % of students earning A
 ● % of students earning B
 ● % of students earning C
 ● % of students earning D
 ● % of students earning E



MVA students' performance in literacy compared to performance of similar students attending in-person schools

High School

End of Year High School English Report Card Grades: Virtual Academy vs. In-Person Schools



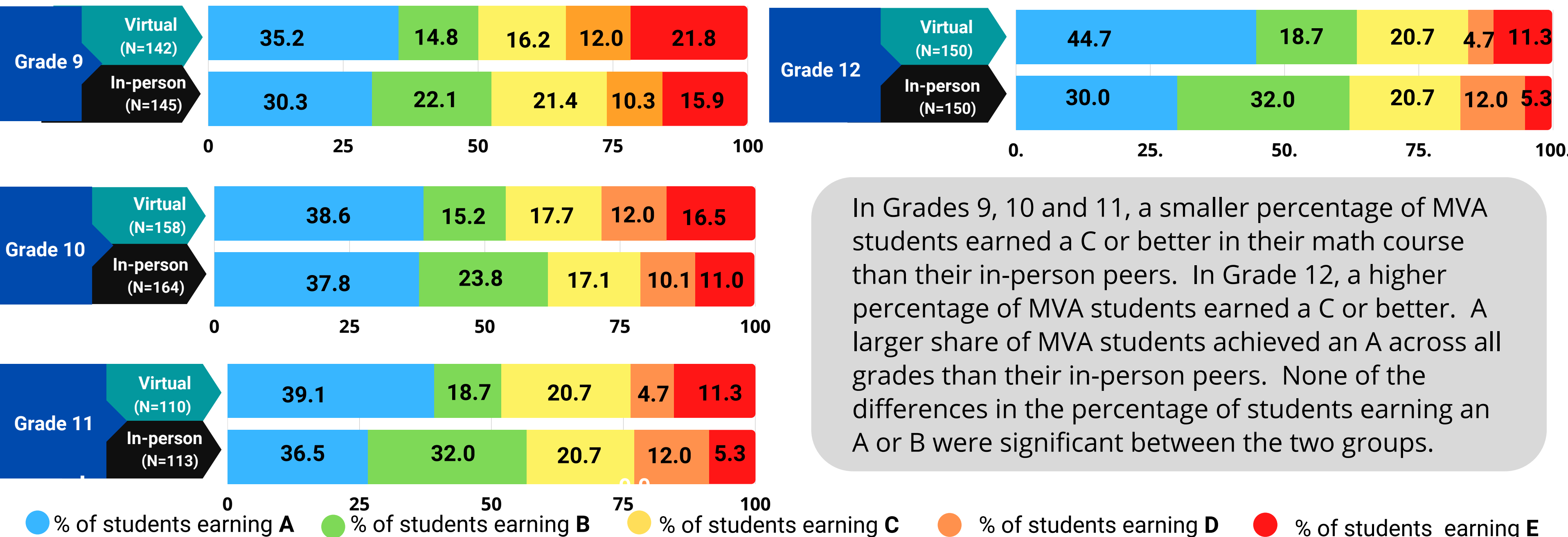
In Grades 9, 10, and 11, a larger percentage of MVA students earned a C or better in their English courses compared with their in-person peers. For grade 12, 82% of MVA students earned a C or better compared with 92% of their in-person peers. None of the differences in the percentage of students earning a C or better were significant between the two groups.



MVA students' performance in math compared to performance of similar students attending in-person schools

High School

End of Year High School Math Report Card Grades: Virtual Academy vs. In-Person Schools



In Grades 9, 10 and 11, a smaller percentage of MVA students earned a C or better in their math course than their in-person peers. In Grade 12, a higher percentage of MVA students earned a C or better. A larger share of MVA students achieved an A across all grades than their in-person peers. None of the differences in the percentage of students earning an A or B were significant between the two groups.



MVA students' GPA compared to GPA of similar students attending in-person schools

High School

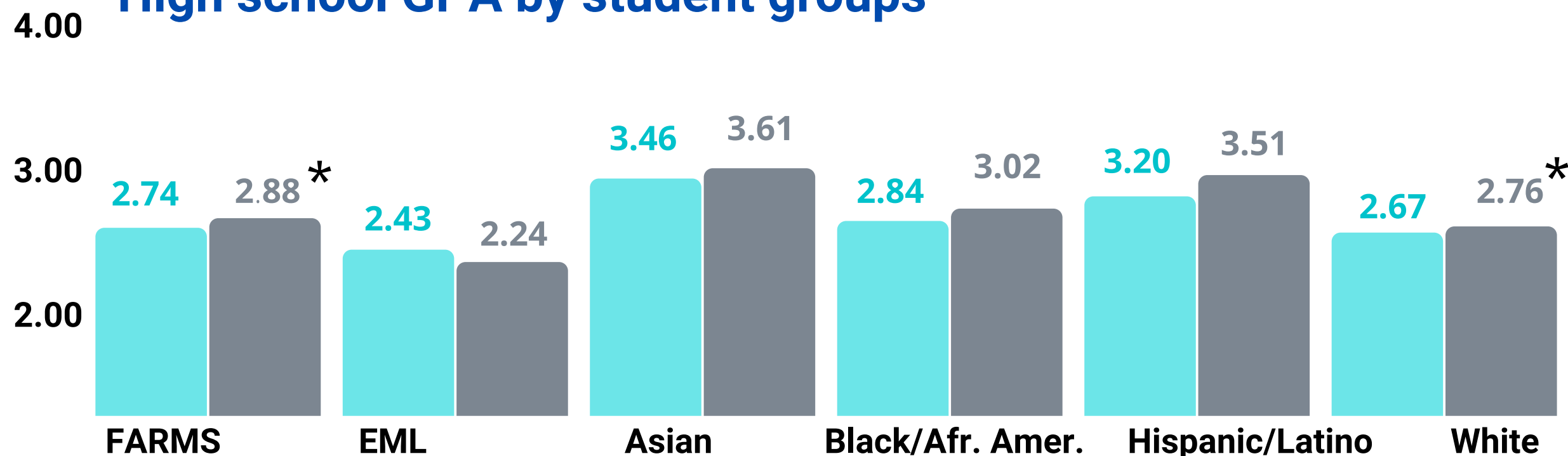
Virtual Academy ● Comparison ●

High school GPA by grade



In Grades 9, 10, and 11, students attending MVA and students attending in-person schools had similar GPAs. Among Grade 12 students, GPA was significantly higher for in-person students than for MVA students.

High school GPA by student groups



In most student service and race/ethnicity groups examined, GPA was similar between students attending MVA and students in the in-person comparison group. For students receiving FARMS and white students, the GPA was higher for in-person students compared with MVA students.

* Statistically significant difference, MVA compared with in-person, ANCOVA, p<.05

In 2021-2022, MCPS implemented a full-time virtual program for students in grades K–12 that was analogous to learning provided at in-person schools, with some exceptions. Social studies and science were delivered fully asynchronously to accommodate large elementary enrollments, and the amount of time for elementary literacy instruction was reduced. Demographically, a larger proportion of Black or African American and Asian students enrolled in MVA compared to the MCPS population. MVA provided an option for many students who benefit from learning in an online environment, such as students with health or physical issues, students with family members with health issues, and students with unique learning profiles. Additionally, stakeholder feedback revealed that MVA fostered strong relationships between students and staff, offered individualized learning, and provided access for students with unique learning profiles. Attendance and achievement outcomes differed by level of schooling. Middle and high school students had similar outcomes compared to their in-person peers. However, elementary MVA students had significantly lower achievement scores than same-grade peers in comparison schools. Significantly higher percentages of Grade 2 - 5 students were chronically absent compared to their in-person peers.

Recommendations



Balance community desire for a virtual educational option with consideration that in-person instruction may yield better outcomes than virtual instruction - particularly for elementary students,



Continue to monitor student attendance, achievement satisfaction, and feedback from stakeholders to gauge the effectiveness of MVA and to determine when adjustments are needed to a student's educational program.

Questions to consider

1

What is the effect of MVA on the attendance, achievement, and socioemotional learning of students enrolled in Virtual Academy compared with similar students enrolled at in-person schools after the 2nd year of implementation?

2

How do attendance, engagement, and academic performance from a student's in-person learning experience compare to the experience of virtual learning?

3

What types of instructional practices best facilitate students' academic success in K - 12 virtual learning?



Resources and References

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