

Policy Analysis re: The General Assembly of North Carolina Senate Bill 193.

AN ACT TO PROVIDE FOR CAREER DEVELOPMENT PLANS FOR ALL MIDDLE AND HIGH SCHOOL STUDENTS

(For more information, contact Dr. Willette Nash, Policy Director, willette@action4equityws.org, 336.891.0683)

Summary

After extensive review of the proposed policy, Action4Equity (A4E) concludes that this bill is developmentally inappropriate for the age group that it targets, does not adequately address concerns about current inequities in access to and participation in workforce development programs, and may lead to an increased and disproportionate rates of Black students (and students from other marginalized communities) not being promoted to the next grade. In lieu of this bill, we propose a renewed focus on:

- Career awareness and exploration activities for students in the 6th - 8th grade;
- Apprenticeship programs beginning in the 8th grade that leverage existing local resources including the Mazie Woodruff Aviation Technology Lab;
- Opportunities to earn college and post-secondary credits through participation in these programs;

Background

[Senate Bill 193](#) requires all middle school students to complete a career development plan, contingent for promotion to eighth grade. A4E understands that every high school graduate may not want to go to a 4-year college. Every high school graduate should, however, have the necessary course requirements for admission to a 4-year institution in North Carolina. We are concerned about the implications of such a regulation. The bill raises several questions for us as an organization concerned with fostering equity in education.

1. Will the proposed career development plan guide some students away from the courses that are required for admission to a 4-year institution in North Carolina?
2. What instructional strategies will be implemented to support middle school students in developing Career Development plans, given that 12-14 years old youth need focused guidance from parents and by proxy, teachers? (Garey, 2022)
3. How does this plan fit with [North Carolina A Guide to Work-Based Learning](#), which calls for career exploration and awareness in grades 6-11?
4. What assessments, other than students' self-report evaluations required by North Carolina Work-Based Learning, will be administered to help inform students' career path(s)?

In addition, A4E finds it necessary to question whether or not the career plan contingency is developmentally appropriate, or in fact, goes “too far,” as pointed out by Zagros Madjd-Sadjadi, an economics professor at Winston-Salem State University, in comments published by the [Winston-Salem Journal](#). As Professor Madjd-Sadjadi noted, “The fact that we see an annual turnover rate of close to 30% in jobs held by young working adults, I think pushing middle-school students to adopt an initial career path is going too far.” A4E’s work with the Embedded Mentoring Program (EMP) confirms that middle-school aged students are still discovering their interests, [specific intelligences](#), (Gardner, 1983) and sense of self-identity. A career path is not yet in view.

While supporters of the bill have asserted that its implementation “will not lead to tracking of students,” A4E is not convinced, and we worry that this policy may result in increased and disproportionate rates of Black students who are in failing middle schools in Forsyth County not being promoted to the next grade. The district, by way of its [Equity Plan 2022-2023](#) has identified six of its fourteen middle schools as being in need of increased monitoring and additional support in order for students to achieve proficiency and college and career readiness. Factors influencing the need for the stated interventions consistently point to instructional capacity in these six schools. When student demographics are considered, there is a pattern of underperformance that impacts Black students (and students from other marginalized communities) relative to state standards for proficiency (Tables 1-12).

A survey of the [NC Toolkit & Guide to Work-Based Learning in North Carolina](#) reveals that there is no requirement for career plan development for eighth grade graduation. The plan only identifies certain grade level appropriate activities for students in North Carolina’s schools (See Table 13).

The plan does require middle school work based programs to “Conduct a student survey to determine student needs and interests and simultaneously to determine businesses that already employ students as part time workers.” Further, the guide suggests that students conduct a self evaluation to discover their interests (p. 51). A4E advocates that these interest-inventories be supplemented with [The Meyers Briggs assessment](#) along with the [Black Genius Planning Framework](#), a guide for parents to help students plan for learning goals and objectives.. These instruments provide important guidance to students, parents, teachers, schools and the business community in helping determine the best fit for apprenticeships.

Furthermore, the science scores in each school that were identified as needing targeted support point to an important instructional approach that aligns with possible success in [Forsyth Technical College Aviation Program](#). (See Table 1). WS/FCS science curriculum is based on the scientific method, utilizing a hands-on exploration of content and concepts. It seems that students in these schools would be very interested in learning about the multiple opportunities in the field/science of aviation. The program promises a pathway to

careers with entry level salaries at \$40,000.00 annually. That goes a long way to helping students achieve economic mobility in a county that bears the ignominious distinction of one of the lowest rates of economic mobility in the nation. With a program of study that includes aviation mathematics, FAA regulations, basic electricity, aircraft drawings; aircraft structures, systems, and components; aircraft engines, theory, systems, and components; and engine inspections and maintenance, an apprenticeship in this area provides an engaging setting to galvanize the skill development students are expected to learn in the classroom.

Middle school is an ideal time to explore career interests. See [North Carolina Workforce Learning Toolkit](#). Apprenticeships beginning at 8th grade and continuing through high school, would afford students the opportunity to study a wide range of careers that also lead to entrepreneurial ventures: cosmetology, dentistry, automotive, (urban) farming, as well as aviation, which is our specific focus as part of this analysis.

STEM AND CAREER DEVELOPMENT

In addition, Women and minorities are underrepresented in the STEM fields (Williams, 2013). SB 193 should be amended to provide exposure and enrichment programs to these target audiences so that they are not only exposed to these fields but also stimulate their interests and potential in these fields. Winston Salem State University (WSSU) has a program that could be used as a prototype.

WSSU Girls Empowered by Math and Science in Transportation (WSSU GEMS-T)

Dr. Denise Johnson funded by the North Carolina Department of Transportation (NCDOT)

The transportation industry has changed tremendously over the last 50 years. Over 13 million Americans are currently employed in transportation-related jobs and almost 50% of them will be ready for retirement in the next decade. There is a decline in the traditional workforce due to changes in technology and the skill levels that are requisite for entry. A more diverse workforce, including more women, is needed to keep pace with an ever-changing global economy. ***The WSSU Girls Empowered by Math and Science in Transportation*** program provides 30 middle school girls in grades 6th – 8th an integrated STEM and Science, Technology, Engineering, Arts, and Math (STEAM) experience with specific focuses on TWO modes of transportation and safety: Land and Water Transportation and exposure to Air Transportation (WSSU, STEM Research, 2022).

Forsyth Technical College Aviation Systems Program. Rather than moving ahead with the policies enumerated in SB 193, A4E believes that local school districts would be better advised to reinforce and expand career and workforce development programs that are already established; in Forsyth County, the WSFCS Career and Technical Department (CTE) should utilize [local resources](#) and expand its portfolio of work to increase career awareness and development for all of its middle school and high school students. Forsyth County Workforce Development’s Career Awareness and Exploration recommendations are consistent with North Carolina Workforce Learning Toolkit. The 8th grade promotion requirement must be stricken from SB 193; local school districts must turn instead to 8th grade apprenticeship opportunities as available in the CTE.

Upon surveying the critical economic drivers of the city, **A4E proposes creating a middle school/high school Aviation Technological Career Development Laboratory (ATCDL).** The Lab could serve as a hub for the introduction to the study of aviation and aerospace engineering. High school aviation technological training would be a prerequisite, too. In implementing the **ATCDL**, A4E strongly advocates for prioritizing the inclusion of students who are attending the middle schools that are targeted for support. The [Aviation Technology Lab](#) is named in honor of Mazie Spencer Woodruff, the first African American elected as a Forsyth County Commissioner. Woodruff was known for her dedication to education and social justice.

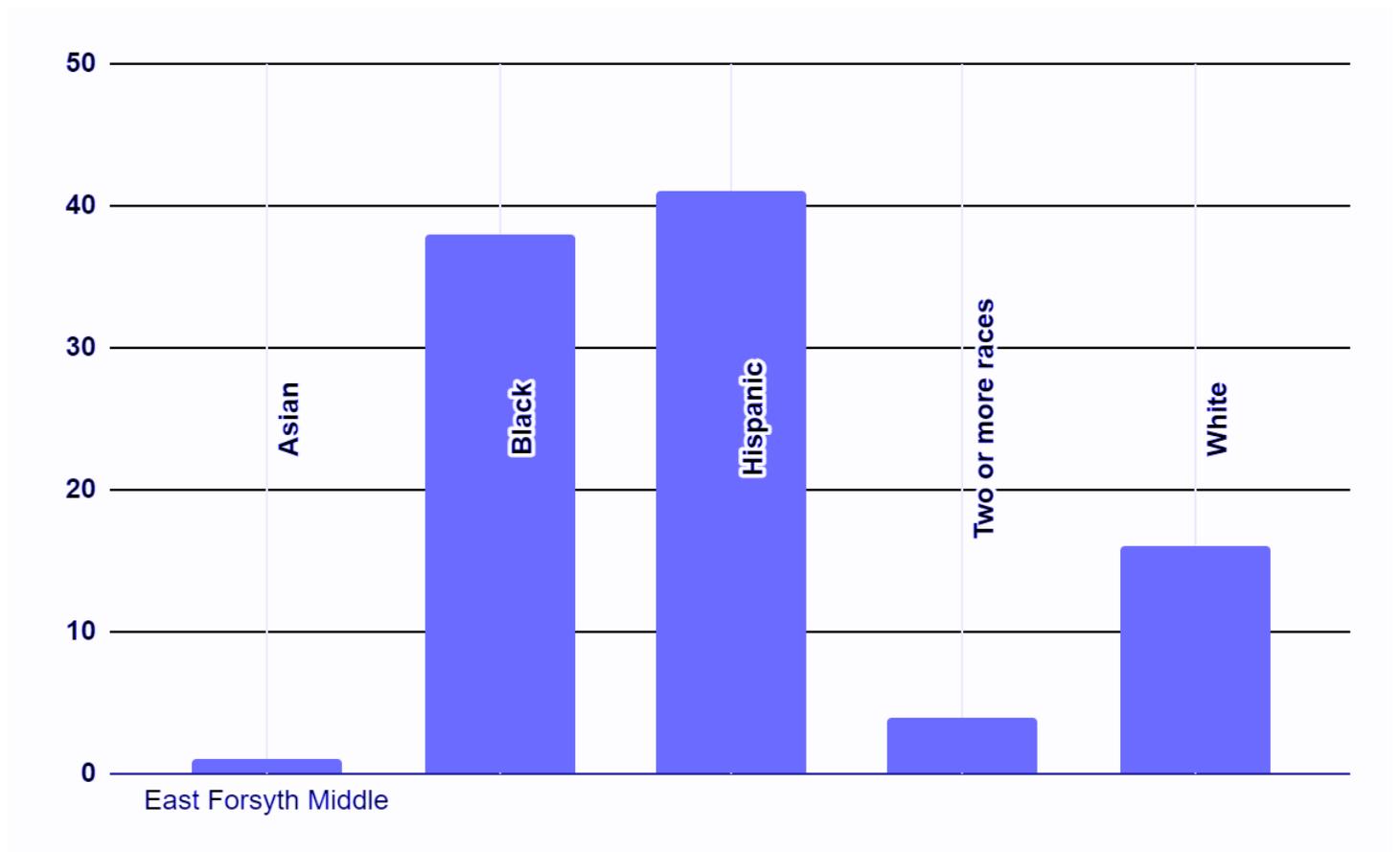
The Technology Lab at Mazie Woodruff offers the following experiences:

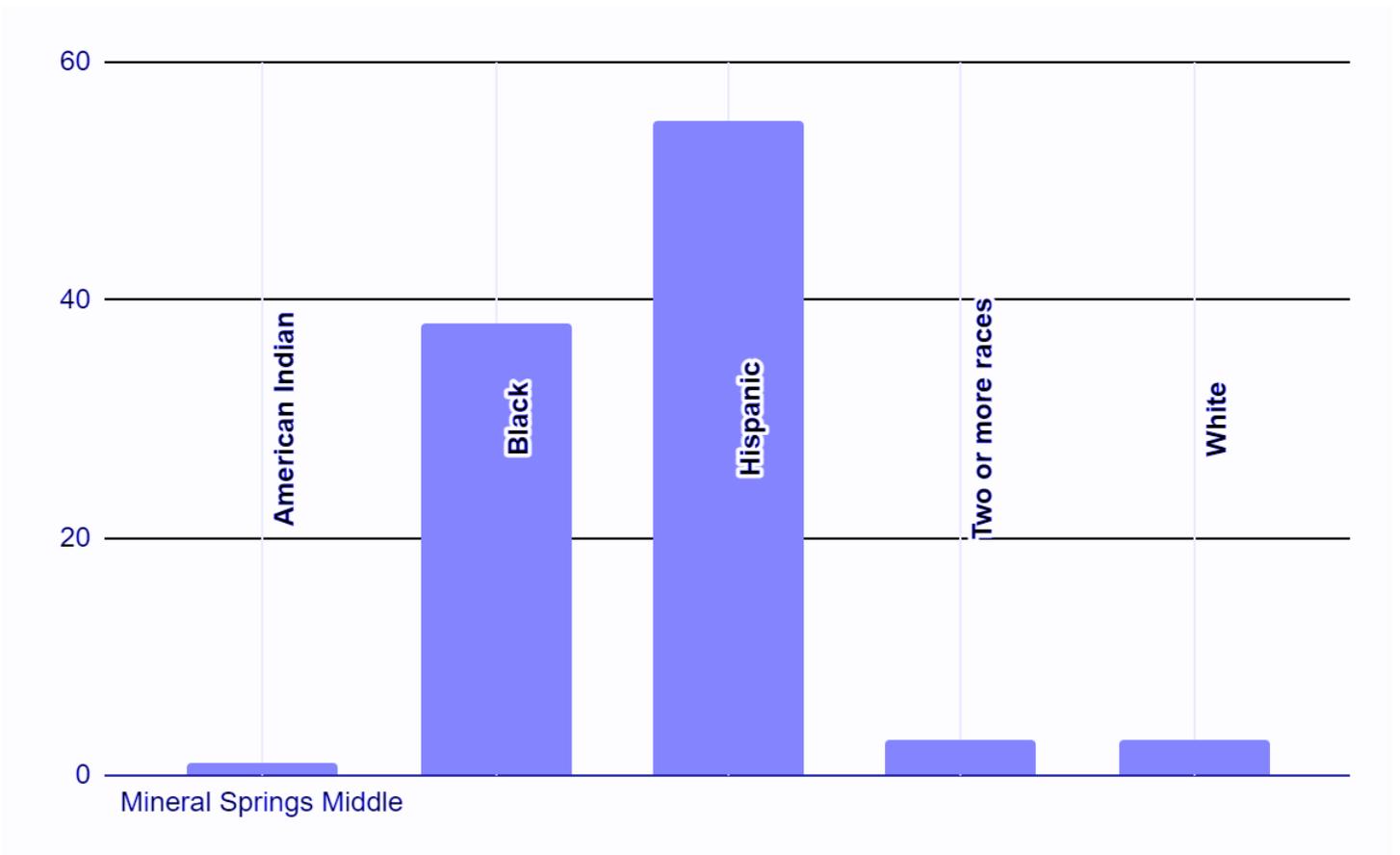
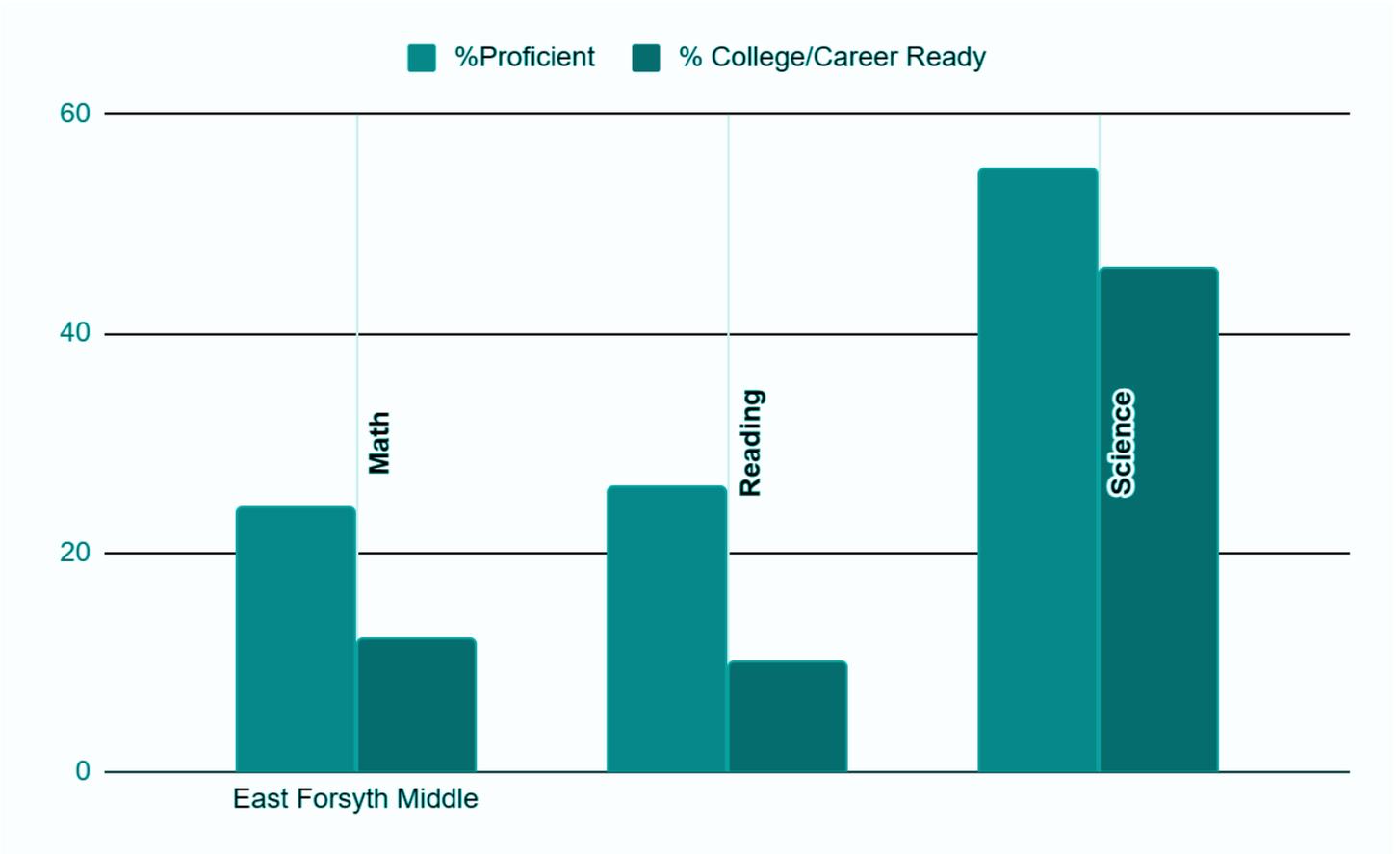
- Sheet Metal
- Turbine Engine
- Composite Structures
- Piston Engine
- Aircraft Welding
- Avionics/Electrical

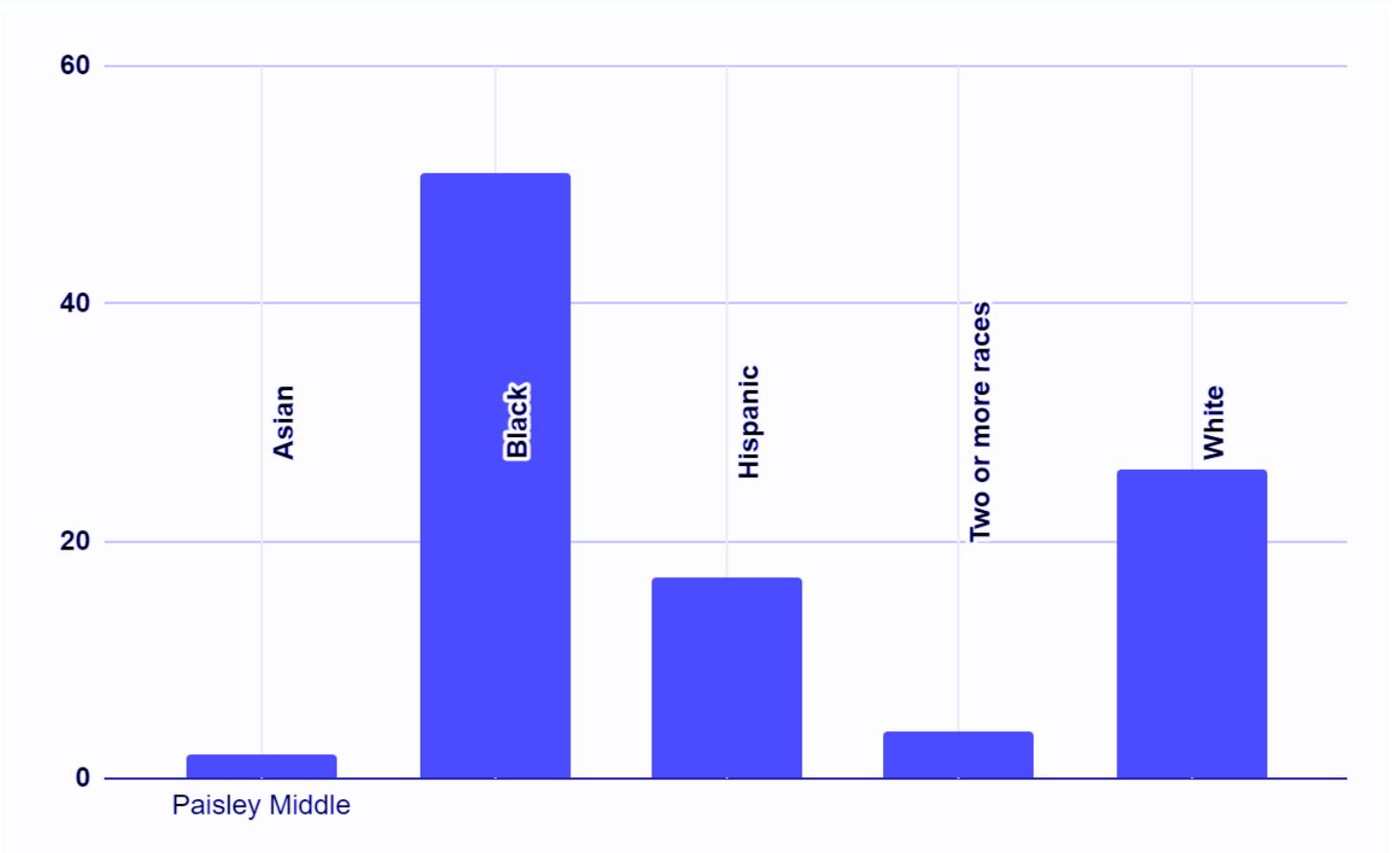
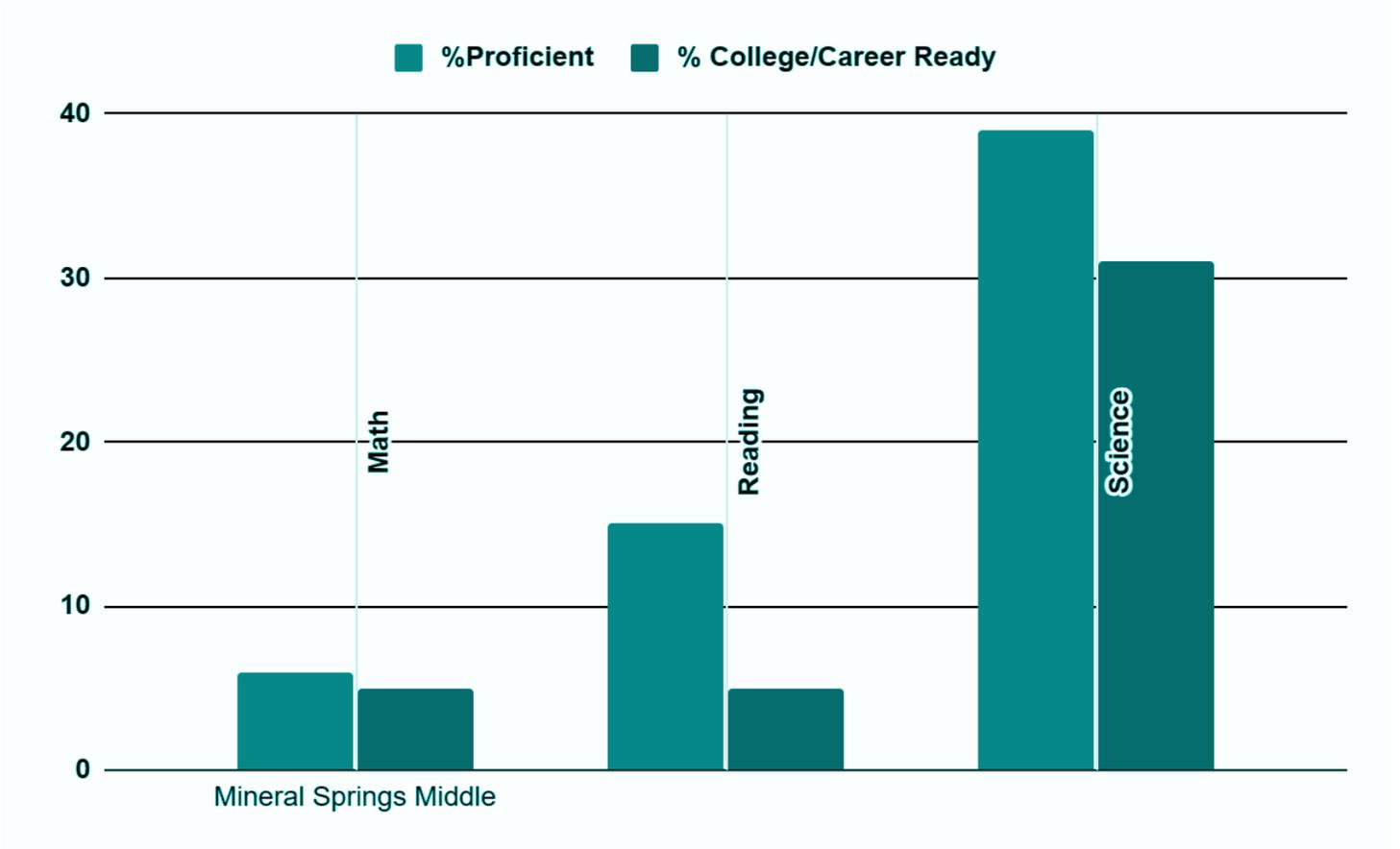
Further, “The Aviation Technology Systems Program will educate an applicant in the requirements necessary to become an Aviation Maintenance Technician. This program will consist of three phases of training: general, airframe, and power plant. It will provide youth with the knowledge and skills to qualify for an aircraft mechanic’s certificate with airframe and/or power plant ratings.” (Forsyth Technical Community College, n.d.)

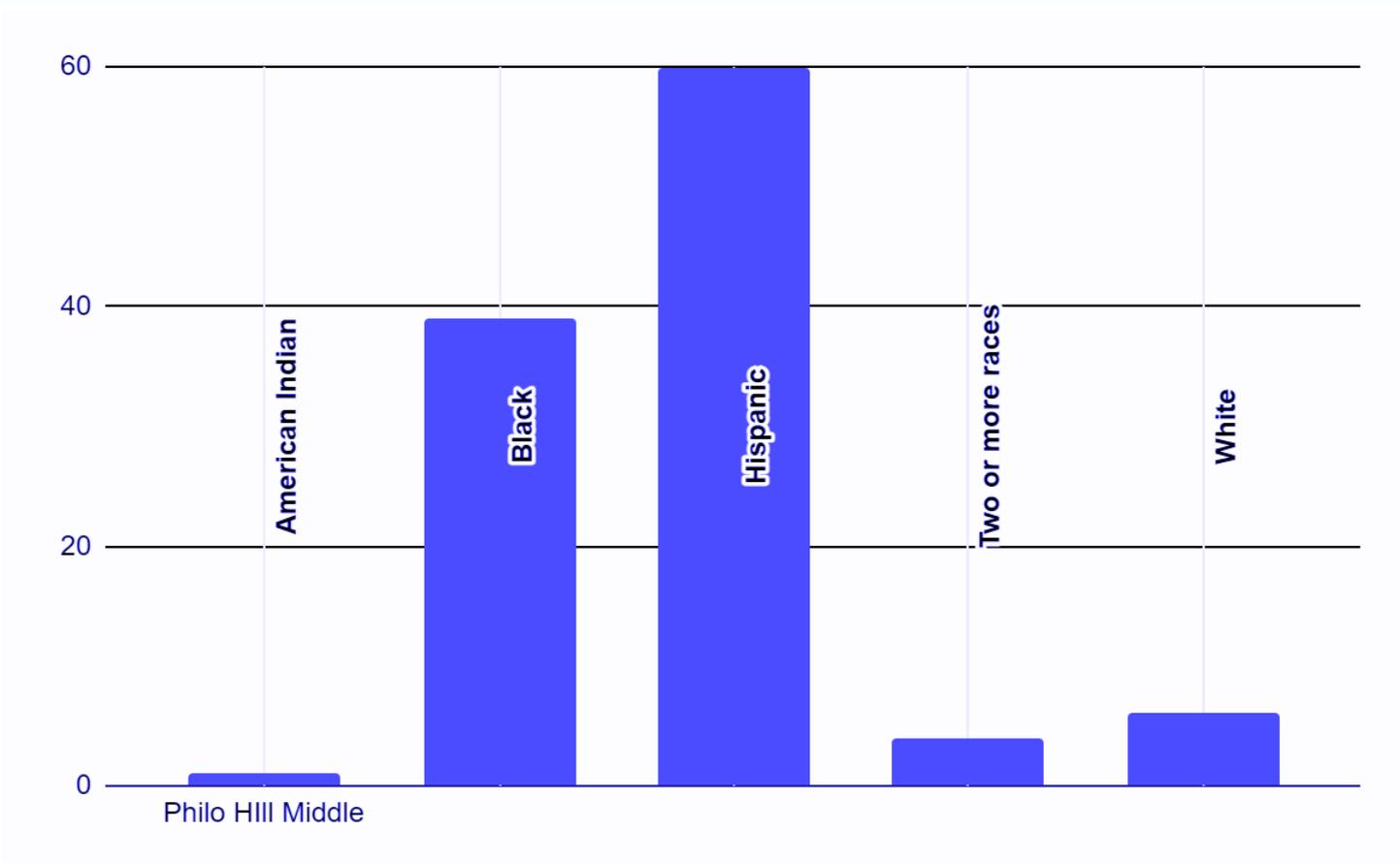
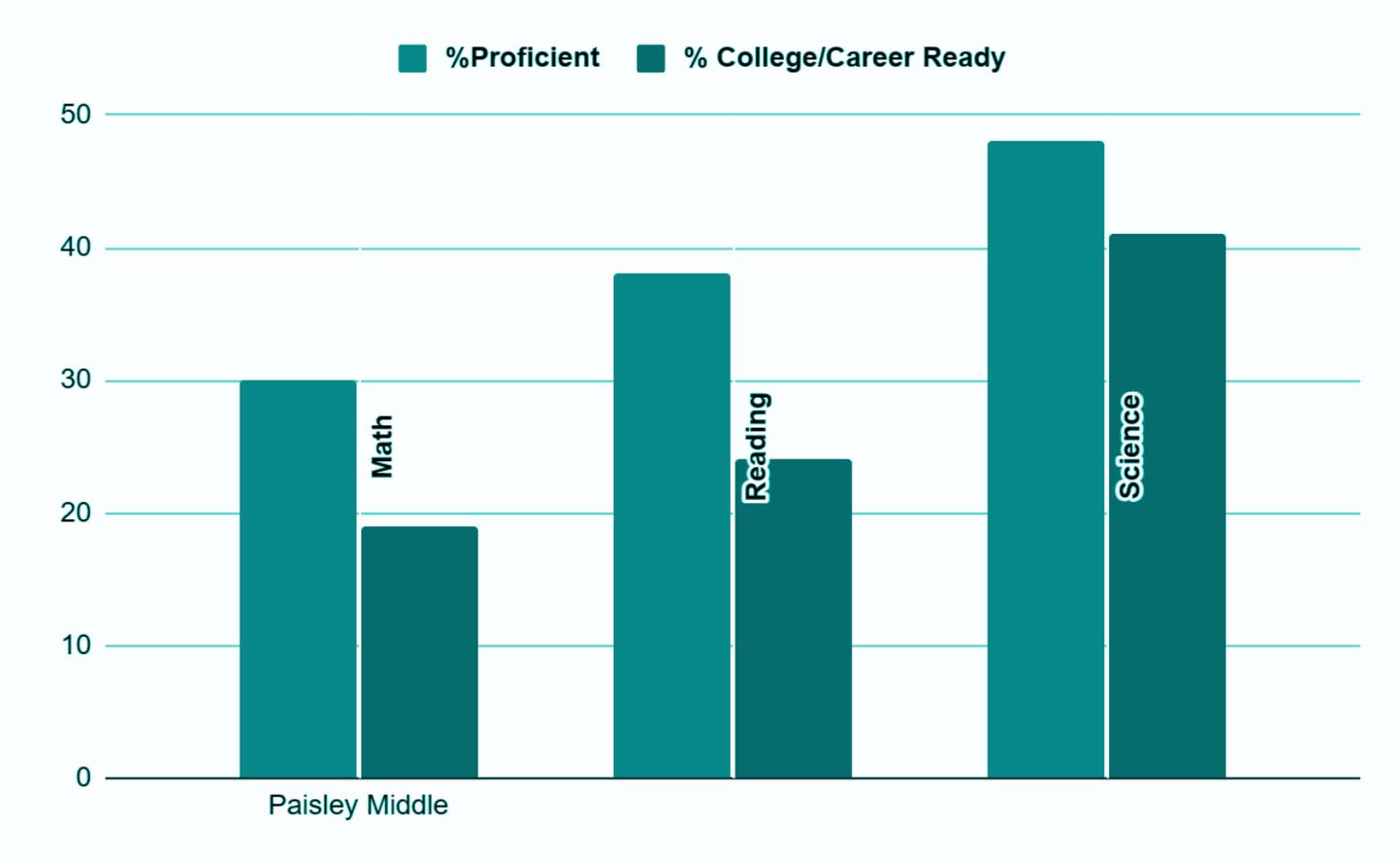
A4E strongly recommends that students WS/FCS targeted support middle schools participate in 6th-7th grade aviation career awareness and exploration activities, followed by apprenticeships beginning at the 8th grade through high school, with students matriculating into the aviation program upon graduation, including an opportunity for dual enrollment credits. We believe this is a more educationally sound and developmentally appropriate approach, in line with [Erickson’s Stages of Psychosocial Development](#) which suggest that learning activities that afford students the time and challenges which develop their identities, foster experimentation and exploration that are more effective at the middle to early high school years in helping students decide on a career path. Additionally, A4E supports [Forsyth Technical College’s commitment to the community and equity](#). (See Table 14 for current student enrollment)

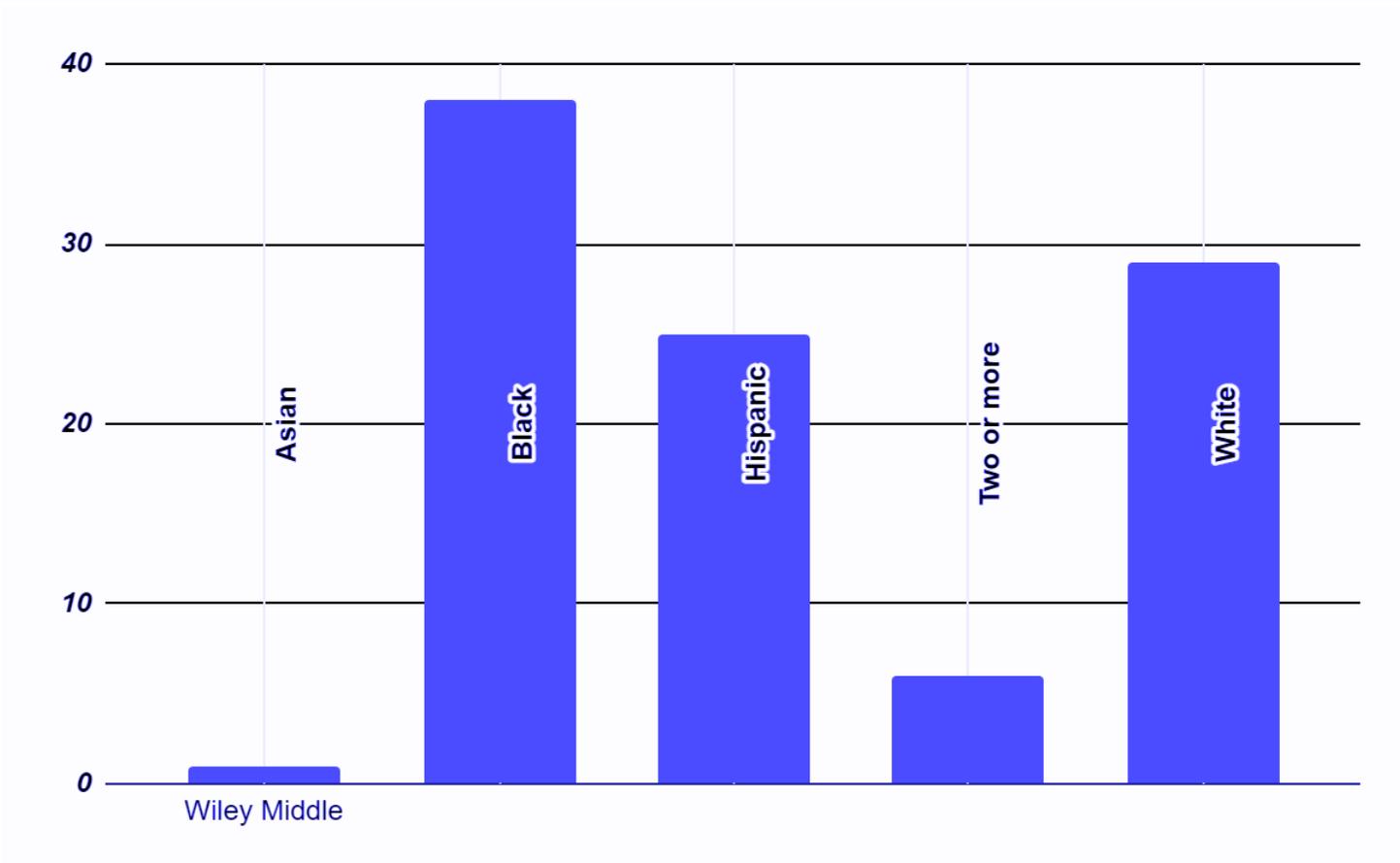
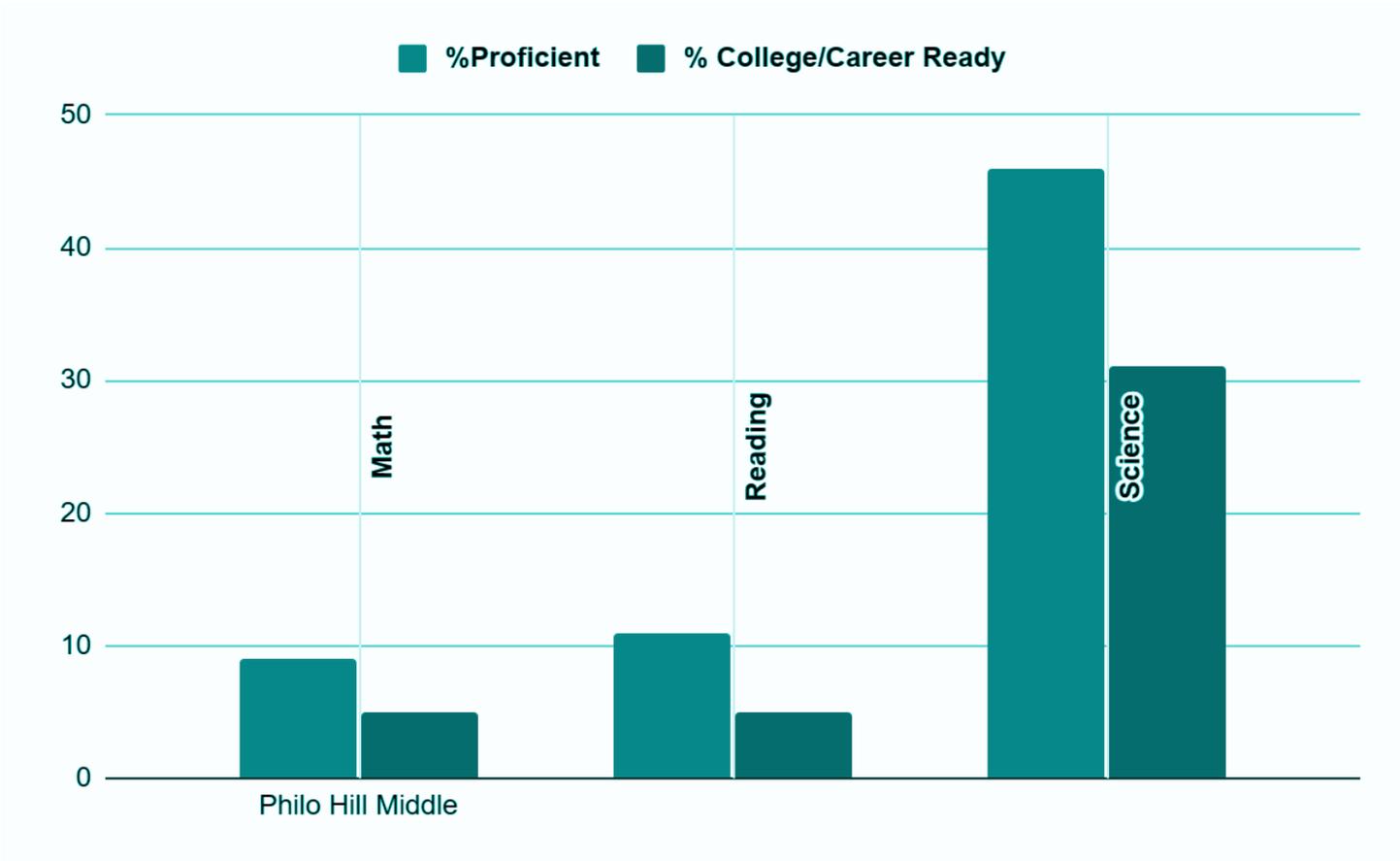
Tables 1-12: Winston-Salem Forsyth County Targeted-Support Middle Schools Student Enrollment by Percent ([Public School Review, 2023](#)) and Percent Proficient/College/Career Ready ([North Carolina School Report Cards, 2022](#))

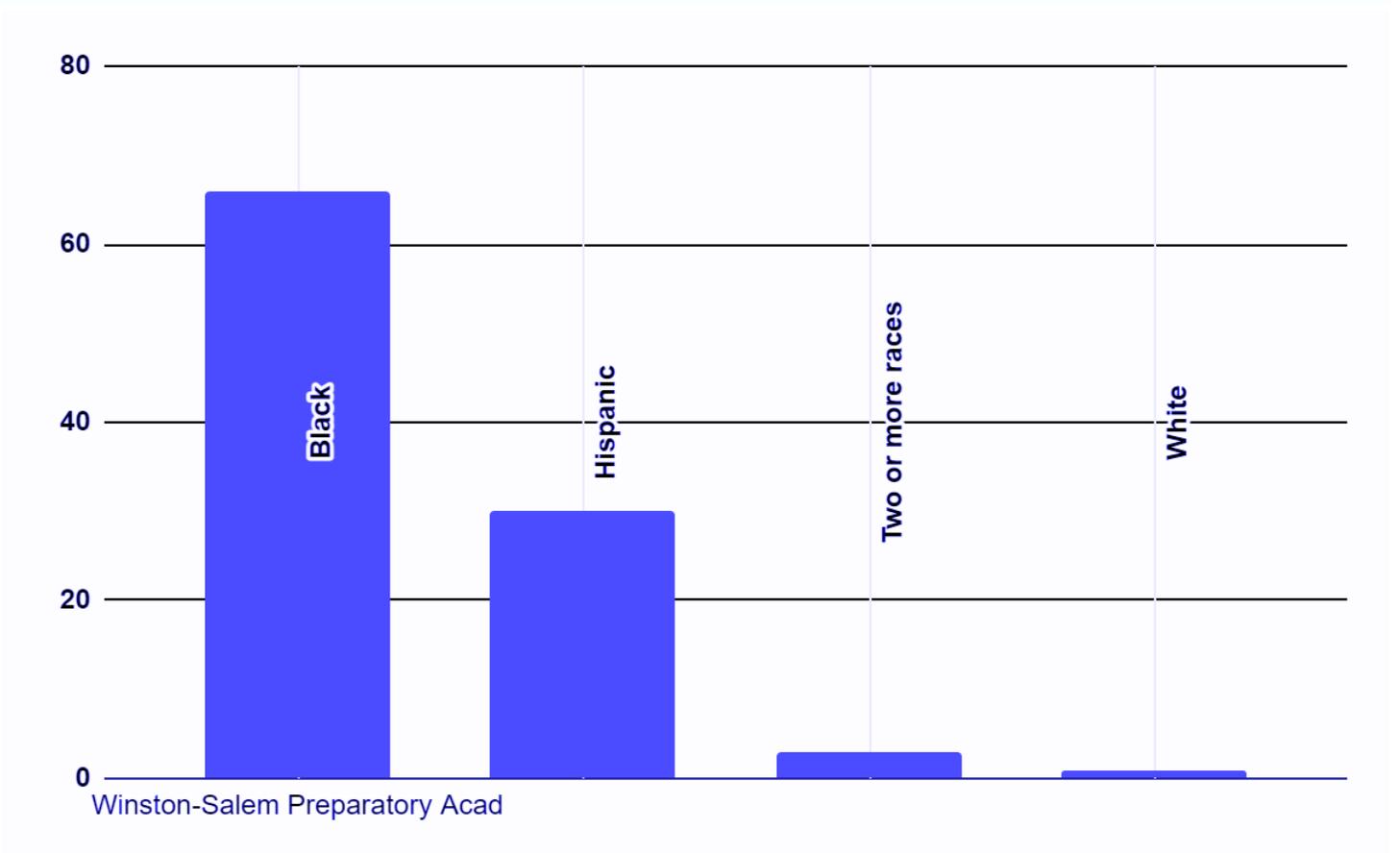
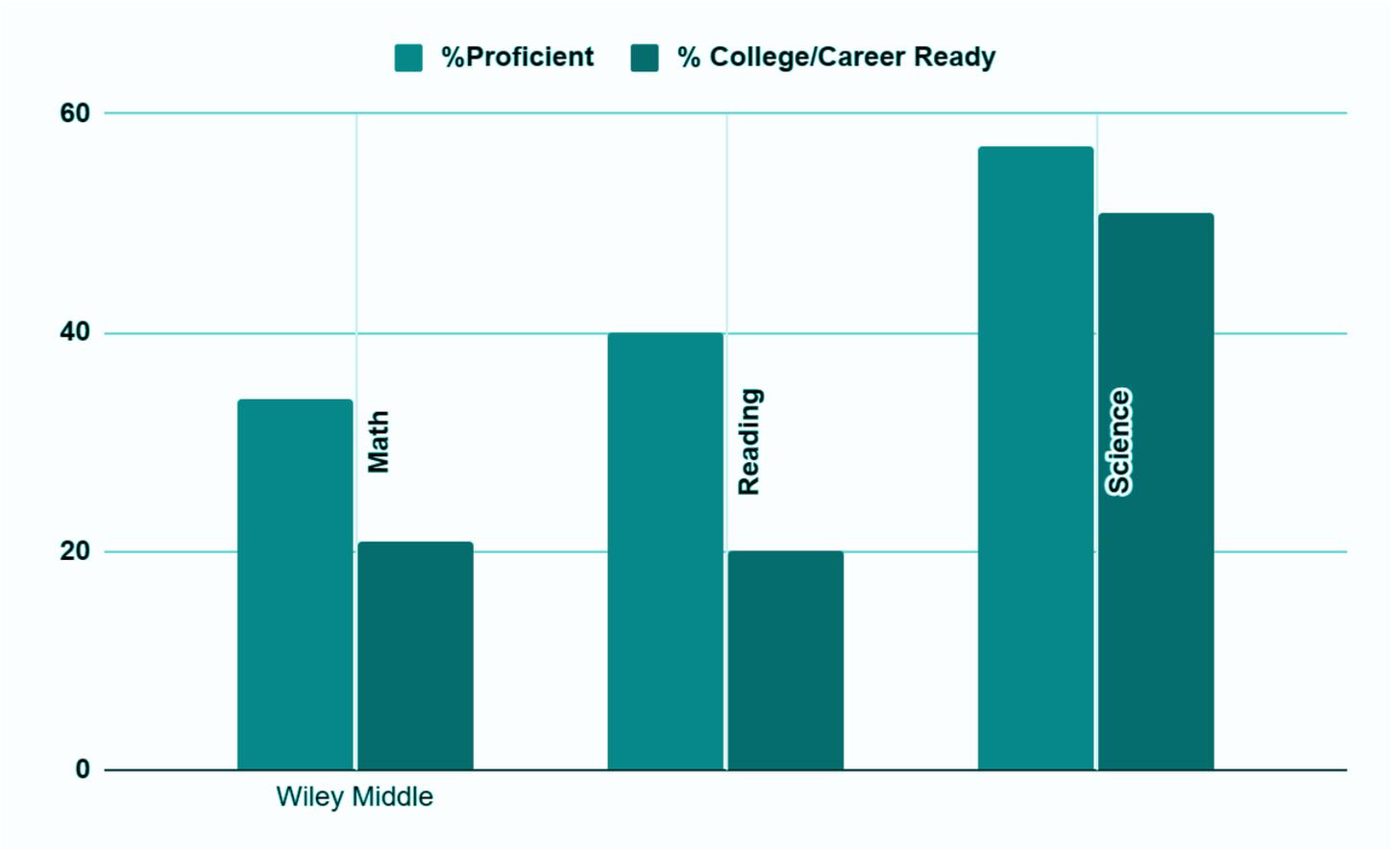












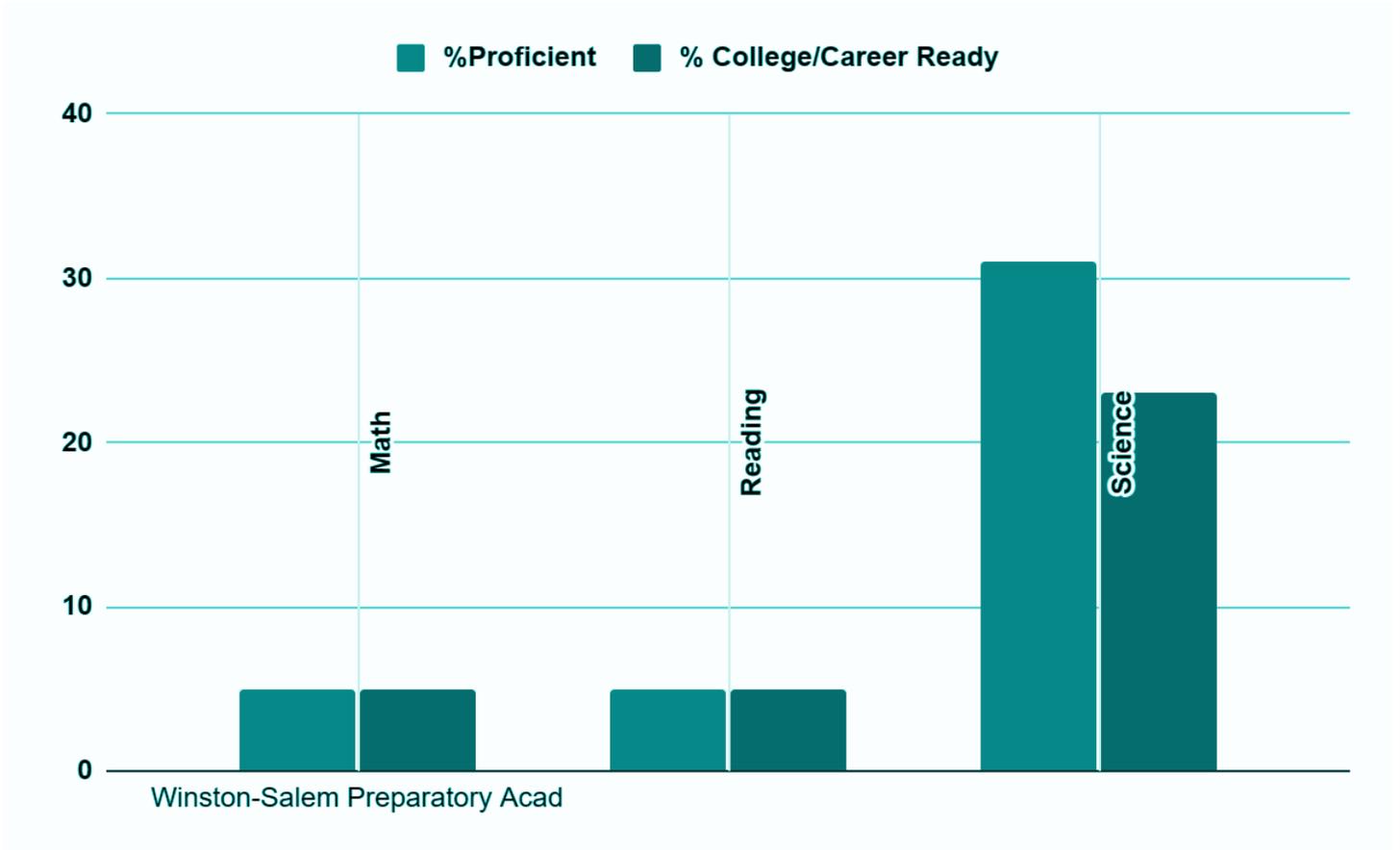
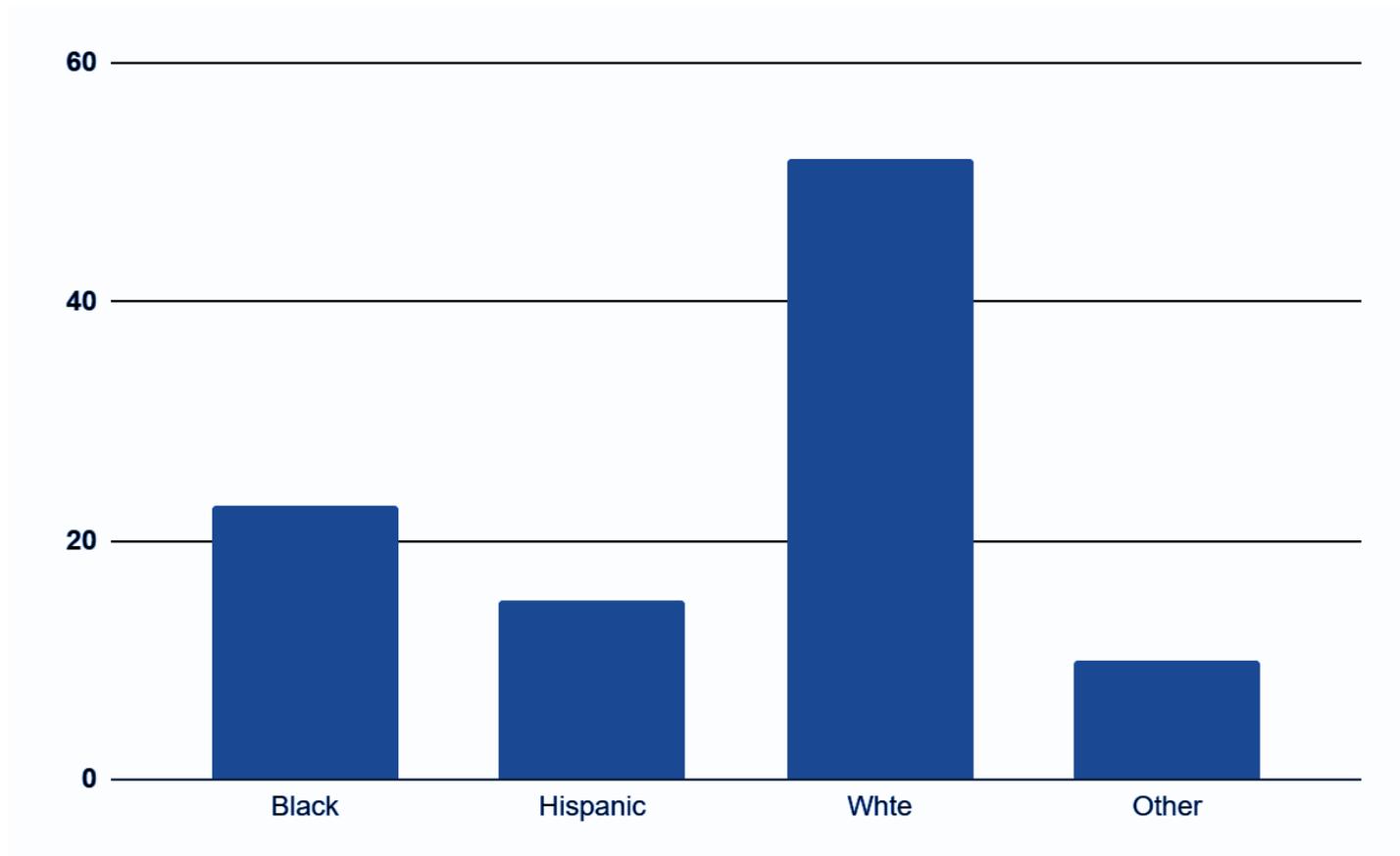


Table 13: North Carolina Work-Based Learning Activities Across Middle and High School

Activity	Grade	Promotion Requirement
Career Awareness	6-7	None
Career Exploration	8-11	None
Career Preparation	12-Post Secondary	High School Graduation

Table 14: Forsyth Technical College Student Enrollment Percentages



References

Craver, R. (2023, March 28). “Public school career plans gains approval in North Carolina Senate.” Winston-Salem Journal. https://journalnow.com/news/state-and-regional/govt-and-politics/public-school-career-development-plan-bill-gains-nc-senate-approval/article_84b32090-cd0a-11ed-870f-6fc4b50f03ff.html

Erickson, E. (1995). *Eight stages of psychosocial development In Childhood and society*. (4th ed), Vintage, London. <https://fosteractionohio.files.wordpress.com/2019/02/erikson-1.pdf>

Forsyth County Community and Economic Development. (n.d.) Workforce development. Forsyth County, North Carolina. <https://www.co.forsyth.nc.us/housing/WFD.aspx>

Forsyth Tech Mazie Woodruff Aviation Program. (n.d.) <https://www.forsythtech.edu/aviation/>

- Forsyth Technical College. (n.d.) Fast facts 2022. Forsyth Technical Community College. Winston-Salem, NC.
<https://www.forsythtech.edu/about-us/fast-facts/>
- Galey, L. et. all (2023). Senate bill 193 An act to provide for career development plans for all middle and high school students. North Carolina General Assembly. Raleigh, N.C.
<https://www.ncleg.gov/BillLookUp/2023/S193>
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences* (3rd ed). Basic Books. New York, NY.
- Garey, J. (2022) Parenting tweens: What you should know. Child Mind Institute
<https://childmind.org/article/what-parents-should-know-about-tweens/#:~:text=Kids%20between%208%20and%2012,go%20through%20big%20physical%20changes.>
- McKenzie, W. (1999). Multiple Intelligences (M.I) Inventory. <https://surfaquarium.com/MI/index.ht>
- Myers-Briggs Type Indicator (1962) In Myers-Briggs Foundation. <https://www.themyersbriggs.com/en-US/Products-and-Services/Myers-Briggs>
- North Carolina Department of Public Instruction (n.d.). A toolkit & guide to work-based learning in North Carolina. Raleigh, N.C. <https://www.dpi.nc.gov/wbl-toolkit-2020/download>
- North Carolina School Report Cards (2022). <https://ncreports.ondemand.sas.com/src/>
- Public School Review (2023). <https://www.publicschoolreview.com/>
- Village of Wisdom, (n.d.) Black genius: Black genius planning. <https://blackgenius.com/black-genius-planning-1>
- Williams, S. (Dec. 13, 2013). Women and Minorities are underrepresented in STEM.
<https://www.edi.nih.gov/blog/opinion/women-and-minorities-underrepresented-stem>
- Winston-Salem Forsyth County Schools (2021.) Equity plan 2022-2023. Winston-Salem, N.C.
<https://www.wsfcs.k12.nc.us/Page/123726>
- Winston Salem State University, STEM Research. <https://www.wssu.edu/academics/research/stem-research/index.html>