## Office of the Superintendent of Schools MONTGOMERY COUNTY PUBLIC SCHOOLS Rockville, Maryland

May 30, 2019

## **MEMORANDUM**

To: Members of the Board of Education

From: Jack R. Smith, Superintendent of Schools

Subject: Choice Update: High School Program Options

In response to the findings and recommendations of the 2016 Metis Report, *Study of Choice and Special Academic Programs* (Attachment A), district efforts to date significantly have increased the number of students accessing enriched and accelerated instruction at the elementary and middle school levels. As an extension of this work, efforts to improve equitable access into high school programs is under way. Concurrently, Montgomery County Public Schools (MCPS) has redesigned components of high school career programs, in response to the external review conducted by Education Strategy Group (ESG) in 2017 (Attachment B).

During the 2018–2019 school year, the reform effort continued to challenge the perception that elementary and middle school students only receive enriched and accelerated instruction through a magnet program. Thirty-four elementary schools implemented the Enriched Literacy Curriculum (ELC), which mirrors curriculum in the Centers for Enriched Studies, for more than 4,300 students identified as likely to thrive in enriched and accelerated instruction. Twenty middle schools offered two enhanced courses in Grade 6 that mirror magnet courses—Applied Investigations in Mathematics and Historical Inquiry into Global Humanities—to meet the needs of more than 3,000 highly able students attending their local schools. Both aspects of the reform effort will be expanded in the 2019–2020 school year; 13 additional elementary schools will implement ELC, 37 middle schools will implement enhanced courses in Grade 6, and all Downcounty middle schools will implement 2 new enhanced Grade 7 courses in mathematics and humanities.

The 2018–2019 school year constituted a year of study at the high school level, with field testing of new high-demand career programs in regional models, such as Aviation and Aerospace, Cybersecurity, Pathways in Technology Network Operations, Fire Science and Rescue, Homeland Security, and Biomedical Sciences. In response to the ESG recommendations, the district also embarked on an effort to develop a new vision for career readiness, strengthen quality and rigor of programs, improve employer engagement, build awareness with stakeholders, and reimagine the Thomas Edison High School of Technology (Attachment C).

In 2017, a work group of internal and external stakeholders was convened to reimagine a new model for Thomas Edison High School of Technology, and, in 2018, a cross-office high school planning team

was established. The work group and planning team sought extensive stakeholder engagement to inform planning for future high school programming, including magnet programs, career programs, and early college opportunities (Attachment D). The work group invited multiple perspectives on program options, considering input and feedback from more than 600 stakeholders in 34 stakeholder engagement sessions that included students, parents/guardians, school and central services staff and administrators, community members, and business/higher education representatives (Attachment E). Related stakeholder engagement in the district also informed the work of the planning team, including the Seneca Valley High School Boundary Study and the Charles W. Woodward High School Reopening and Nontraditional Facilities Study Group.

The planning team collaborated with school-based administrators and staff on preliminary design and logistics; and members of the team worked with staff in the offices of School Support and Improvement (OSSI), the Chief Operating Officer, the General Counsel, and the Department of Communications to align efforts with current discussions about facilities, boundaries, transportation, Board policies, MCPS regulations, and consistent messages to all MCPS audiences. The team not only considered recommendations of external audits, but also examined data on student performance and demand for programs, state and district priorities, and changing industry demands. As a result of these efforts, MCPS has developed a long-range strategic plan for high school programming in the district.

## Strategic Plan: Vision for 2025 and Beyond

Equitable access to programming is critical to serving the students of MCPS. Key recommendations from the external reviews indicated the following areas of focus most relevant to this work at the high school level:

Metis Report: Study of Choice and Special Academic Programs

- Implement modifications to the selection process for academically competitive programs to focus on selecting equitably from applicants who demonstrate a capacity to thrive in the program.
- To the extent that MCPS invests in expanding seat capacity in Choice and special programs to draw level with growth in district enrollment and demand, it should ensure that these efforts are aligned with the district's core values, including equity.

## Education Strategy Group Career Readiness Review

- Ensure that programs of study are rigorous and enable students to graduate with college credit and postsecondary-level industry-recognized credentials.
- Design and execute a systematic approach to delivery of career programs across schools ensuring that every student has access to a high-quality program of study of his/her choice.

These recommendations, coupled with extensive stakeholder feedback, drove the design of the high school strategic plan. MCPS will build on the model introduced at elementary and middle schools and will expand access to college and career programs both regionally and locally, and extend effective

instructional and programmatic models and strategies already employed at many high schools to ensure that all local schools meet the wide range of their students' learning goals.

#### Goals of the High School Strategic Plan

Long-term goals of the strategic plan include ensuring that every high school graduate will be prepared for academic, career, civic, and personal success. High school students will have equitable access to unique programs and will have opportunities to engage in at least one college or career readiness pathway. The intent of the plan is to provide all high school students access to robust programs and a level of choice that matches their interests, talents, and future college and career plans.

#### **Decision Making**

In order to meet the goals of the high school strategic plan, the following principles guide all decisions related to high school options and form the basis of a decision-making rubric:

- Offer relevant programs that meet high student demand and provide high-quality results after graduation.
- Build student interest; expose them to possibilities; develop their skills, knowledge, and character.
- Mitigate socio-economic isolation and provide students with an opportunity to experience a diverse educational setting.
- Provide multiple *on ramps*, or opportunities to enter programs at different grade levels.
- Employ transparent and consistent processes for decision making.
- Communicate clearly with students and families about options available.
- Allocate resources effectively.

As high school buildings are expanded or opened, the district will have the opportunity to add new programs and relocate or expand existing programs. Similarly, as student demand declines or the quality of program outcomes for students decreases due to industry demand or changes in higher education, programs may be considered for discontinuation. Decisions about relocating, expanding, adding, or discontinuing programs will be made using a rubric based on the guiding principles, employing clear and consistent processes that engage key stakeholders in the decisions.

## Strong Local Schools

Currently in MCPS, with five countywide or regional magnet programs, one countywide part-time career readiness high school, five regional career programs, and two high school consortia, approximately 80 percent of high school students choose to stay in their home school full-time. While this may be related to lack of transportation in some cases or extended bus rides in others, it primarily is the result of strong comprehensive college and career programs at the local schools.

The remaining 20 percent have shown the desire to participate in a distinct college and career program that is not available to them at their home school, and they are willing to attend another high school

that offers the unique program. The high school strategic plan strikes a balance between promoting local school programs and expanding unique programs at more locations.

#### Phased-in Implementation of Regional Programs

The high school strategic plan calls for a phased-in rollout of a coordinated system of high school programs that engages all students in their learning, challenges and supports their growth, and ensures equitable access to comparable programs in multiple locations. The plan is designed to expand access by increasing proven programs, increasing seats, and bringing programs closer to students' homes. Beginning in the first phase, starting in fall 2019, through full implementation during the next six years, MCPS will establish an intentional network of program options. Over time, new programs may be introduced and existing programs may be expanded or replicated and strategically distributed throughout the County. All regional programs will be managed centrally and will require an application; some will require multiple measures for admission.

Existing regional programs include the following:

- Consortia
- Dual Enrollment (e.g., Middle College, Early College)
- College and Career School (e.g., Thomas Edison High School of Technology)
- College and Career (e.g., Aviation and Aerospace, Fire Science and Rescue)
- Programs requiring multiple measures of performance
  - o Communication Arts
  - Global Ecology
  - o Humanities Program
  - International Baccalaureate (IB)
  - Leadership Training Institute
  - o Math, Science, and Computer Science
  - o Project Lead the Way
  - Visual Arts Center (portfolio)

#### Phase One: Marketing in 2019–2020 and Implementation 2020–2021

In fall 2019, MCPS will begin marketing local and regional options to Grade 8 students and their families, for participation in Grade 9 during the following school year, 2020–2021. In this first phase, the district will introduce five major components of the high school strategic plan:

- Universal review in Grade 8;
- Strong local school programs;
- Expansion of countywide IB program to additional schools;
- Two regional comprehensive college and career schools, Upcounty and Downcounty; and
- Streamlined marketing, application, selection, and notification processes.

#### Universal Review in Phase One

During fall 2019, the district will continue the efforts under way in elementary and middle schools to identify the many highly able learners in every school and will conduct a universal review of Grade 8 students. Multiple measures, including student performance data; information about course enrollment; and student, parent/guardian, and teacher surveys will be analyzed to determine interests and mindset and to predict students likely to be successful in honors and advanced courses as early as Grade 9. The results will be provided to parents/guardians to assist them in making decisions about their students' course registration at the local school and about applying to regional programs. The results of the review also will be provided to schools to assist their efforts to enroll students in appropriate courses and levels, and to help them communicate with parents/guardians about available options. All high schools will be encouraged to group students with their academic peers and to include students who show promise through mindset or other measures.

#### Strong Local School Programs in Phase One

During summer 2019, the high school team will initiate a long-range plan to strengthen the infrastructure in all high schools to meet the full range of student needs and interests. Central services and school staff and administrators will collaborate to identify programs and approaches that have resulted in equitable access and improved participation and performance of students. Such effective approaches as Equal Opportunity Schools, academy structures, signature programs, career programs, and smaller learning communities will be disseminated to all high schools through a professional learning community. Professional growth opportunities will support schools' efforts to improve the rigor and relevance of programs and enhance the relationships and culture within their buildings, in order to promote the engagement and learning of all their students.

The team will help schools examine existing programs to identify potential areas for change and strategies for bolstering the secondary school experience, including strong partnerships with industry and higher education; instructional models such as project-based learning; and such specialized experiences as capstone courses, senior research, team projects, competitions, and internships. School staff will collaborate with central services staff to examine student demand and performance data, industry and higher education demand for specific skills and knowledge, and resource allocation. School staff will examine their programs for potential opportunities to continue specialized middle school experiences and studies as students make the transition to high school. A process to introduce a new local program will be established, in collaboration with staff in OSSI.

## Regional College and Career Schools in Phase One

Currently, every high school offers a selection of career programs. Constraints related to state of Maryland career program requirements for course sequences, space, equipment, instructor qualifications, industry involvement, work-based experiences, and professional training preclude individual schools from offering more than a few of the state-approved programs at each location. In addition, student demand in individual schools often does not yield the critical mass needed

to offer a full program sequence locally. MCPS therefore offers countywide access to 18 career programs part-time at Thomas Edison High School of Technology. Students attend Thomas Edison High School of Technology during the morning or afternoon and their home schools for the remainder of the day.

The ESG report included a recommendation that MCPS modify the current Thomas Edison High School of Technology model and situate the school as an integral part of the career readiness vision in MCPS by converting Thomas Edison High School of Technology into a full-time school. After considering research, national models, scenarios specific to Thomas Edison High School of Technology, and stakeholder feedback, the work group convened by the Office of Curriculum and Instructional Programs (OCIP) in 2017 identified two viable models for the current facility (Attachment F). The high school planning team engaged in conversations with Wheaton High School and Thomas Edison High School of Technology staff and administrators to explore a partnership between the two schools. A concurrent exploration of a comprehensive, full-time career readiness model was undertaken with staff and administrators at Seneca Valley High School, to develop an Upcounty version of the new model.

Phase One of the high school strategic plan will introduce two regional college and career schools at Thomas Edison High School of Technology in partnership with Wheaton High School; and, at Seneca Valley High School to begin in Grade 9 in fall 2020. Students in two defined catchment areas will have the opportunity to attend one of the high schools full time and to participate in a high-demand career program unavailable in their local schools. The two high schools will offer career programs in areas of high industry demand (Attachment G), which offer such quality outcomes for students as college credit during high school, industry certification, articulation to college and university programs, and the potential for a living wage and career advancement. The programs will be offered in comprehensive, four-year models, and will leave room in students' schedules to take a full range of core and elective courses.

## Regional International Baccalaureate Schools in Phase One

IB programming currently is offered at eight high schools, one of which, Richard Montgomery High School, is open by application countywide. More than 1,000 Grade 8 students apply to the countywide program each year for 100 available seats from out-of-area schools and for 25 seats from middle schools feeding into Richard Montgomery High School. In response to the high demand for IB programming and the Richard Montgomery High School model, MCPS will expand the program to three additional high schools with existing IB programs, potentially tripling the number of available seats. In fall 2019, students in Grade 8 will have the opportunity to apply for attendance in the 2020–2021 school year. MCPS will continue to employ the existing selection process, using multiple criteria for assignment to the IB program at the four locations.

## Defined Areas for Regional Programs in Phase One

In fall 2019, MCPS will introduce specified regions for programs offered outside local high schools. In collaboration with staff in the Office of the Chief Technology Officer (OCTO), Department of Transportation, and Department of Facilities Management, the regions will be defined to create

a potential for reduced bus rides where transportation is provided, and increased proximity to programs. The areas will be balanced demographically and in number of high school students within each region.

Streamlined Marketing, Application, Selection, and Notification Processes in Phase One

The planning team is designing student- and family-friendly processes to provide timely, clear communication about options available to them; invite applications; and notify them of application status. Cultural sensitivity and awareness of preferred languages or communication methods will be critical aspects of these processes to ensure equity and effectiveness. In fall 2019, in collaboration with the Department of Communications and OCTO, OCIP will introduce a new common marketing, application, and notification process to families of Grade 8 students.

Common marketing materials describing all local and regional programs available to students in designated areas will be distributed at one time early in the fall. This communication will provide information about how to apply to the regional programs, after considering location and student interests and skills. Parents/guardians will have the opportunity to apply to multiple programs available to their students in a specified region using a single, online application form. For programs that require multiple measures, including an additional assessment, parents/guardians will receive pertinent details. In time for the high school registration period during winter 2020, families will receive a single notification of students' application status for any programs to which they applied.

In addition to U.S. mailed or e-mailed communications, specific to application-based programs, common marketing materials for centrally managed high school programs will be made available to parents/guardians and students through other means, including the MCPS website that will feature interactive maps, an interactive tool for parents/guardians and students to determine available programs, student videos, and additional information about high school programs. Print materials will be available at each high school and printed in English, Spanish, Chinese, French, Vietnamese, Korean, and Amharic languages. In later phases, marketing will begin in Grades 6 and 7, and could be provided to families as early as in the elementary school grades.

During the 2019–2020 school year, MCPS will continue to use the enhanced selection process introduced during the 2018–2019 school year for programs requiring multiple measures. In later phases of the high school strategic plan, after additional programs are expanded to offer more available seats, a new selection process will be implemented to ensure equity and access to programs that have limited available seats.

#### Later Phases through the 2025-2026 School Year and Beyond

Implementation in later phases will be guided by a quality assurance process established to identify criteria for success; evaluate existing local and regional program integrity; and assess need for expanded or relocated regional programs. A schedule will be developed with regular short-and long-term review points to inform planning throughout the phased-in implementation. The process will consider internal and external stakeholder feedback, student demand, trends in the labor market and higher education, state requirements, district priorities, and available resources. The process will be used to determine which programs to expand and where to locate them, recommend new regional programs, and determine which regional programs to consider for discontinuation. Early thinking about

programs to be opened by the final year of the strategic plan include auditioned and interest-based arts programs, regional sites for less commonly studied languages, and a wide array of university course offerings at a regional high school.

#### **Next Steps**

The planning team will finalize preparation for Phase One immediately, taking the following actions:

- Post web-based information about the strategic high school plan and a web-based feedback form for parents/guardians, staff, and the MCPS community following this evening's Board meeting.
- Communicate with central services and school administrators, and Grade 7 parents/guardians.
- Continue design teams for new or expanded programs.
- Build awareness among central services and school staff.
- Provide professional development to regional IB program teachers and to high school counselors and college and career information coordinators.
- Complete transportation planning for programs opening in fall 2020.
- Complete budget planning for Fiscal Year 2020–2021.
- Complete streamlined digital and hard copy marketing materials, common application, notification for programs opening in fall 2020.
- Complete logistics for universal review at Grade 8 to be implemented in fall 2019.

The Metis and ESG reports have been catalysts for reimagining a systemic approach to ensuring equitable access to challenging instruction. This effort has revealed the importance of providing options not only in regional programs, but also in every local school, to meet the many needs and interests of all students and to prepare them for their futures after graduation. The long-term high school strategic plan extends the district's reform effort through all Grades, Pre-K–12, starting early with the highly successful early talent development model and culminating in college and career readiness. The design emphasizes identifying and nurturing potential in the earliest grades and building foundational skills of literacy, numeracy, creativity, and critical thinking throughout a student's education. The Board, with all adults in the district, now more than ever must renew our sense of urgency to educate all students so that they are fully prepared to successfully participate in the many options that will be available to them in high school and after graduation. By meeting our obligation to develop every student's skills and knowledge at every grade level, we will afford our students true choice.

I will continue to update you as the planning team progresses through the early stages of implementation during the 2019–2020 school year.

JRS:MVN:lsl

Attachments

## **Metis Choice Study Findings and Recommendations**

**Key Finding 1:** MCPS provides a wide variety of choice and special academic programs that have been developed at key junctures in MCPS's history and layered upon each other to create a complex system of programs that are not fully aligned with the district's core values, including equity

• **Recommendation 1:** Revise Policy ACD, *Quality Integrated Education*, to clarify a defined mission for choice and special academic programs with input from community and staff stakeholders to clearly outline the goals and purposes for the programs, as well as their v alignment with MCPS' core values and stakeholders' strong belief that MCPS should pursue equity on a broad level by raising expectations and opportunities for rigorous instruction across all schools.

**Key Finding 2:** Information and communications about MCPS's wide variety of choice and special academic programs are not filtering to all segments of the community equally, which is impacting equity of access to the programs

- **Recommendation 2:** Develop and implement new strategies for communicating, outreach, recruitment, and sharing information with underrepresented or hard-to-reach families within MCPS. These strategies should include, but not be limited to:
  - o Streamlined communications in easily-understood language;
  - o Revision of existing communication tools for cultural validity;
  - Outreach to families at community events or locations;
  - More opportunities for one-on-one or in-person communications with and recruitment of families; and
  - o Additional materials and events held in languages other than English.

**Key Finding 3:** There are significant racial and socioeconomic disparities in the enrollment and acceptance rates to academically selective programs, which suggest a need to revise the criteria and process used to select students for these programs to eliminate barriers to access for highly able students of all backgrounds.

- **Recommendation 3a:** Implement modifications to the selection process used for academically competitive programs in MCPS, comprising elementary centers for highly gifted students and secondary magnet programs, to focus these programs on selecting equitably from among those applicants that demonstrate a capacity to thrive in the program, that include use of non-cognitive criteria, group-specific norms that benchmark student performance against school peers with comparable backgrounds, and/or a process that offers automatic admissions to the programs for students in the top 5-10% of sending elementary or middle schools in the district.
- **Recommendation 3b:** Invest resources to expand and enhance early talent development programs for students of underrepresented groups in order to bolster participation of a broader segment of the MCPS student population in academically selective programs.

**Key Finding 4:** The district's implementation of some provisions in the current Board Policy JEE, *Student Transfers*, does not fully align with MCPS's goal to provide equitable access to choice and special academic programs.

- **Recommendation 4a:** Consider revisions to Policy JEE, *Student Transfers*, to clarify that the sibling link for immersion and other choice programs is not automatic; while siblings of applicants should be able to attend the same school where the special academic program is located provided that there are available seats, those siblings should be required to participate in the application process, such as the lottery for immersion programs to earn a seat in the program.
- **Recommendation 4b:** To the extent that the district considers revisions to Policy JEE, *Student Transfers*, to alter the automatic articulation from middle school to high school within the cluster feeder pattern or consider approvals for programmatic requests, MCPS should analyze the impact on both school capacity and its efforts to promote diversity and avoid racial isolation.

**Key Finding 5:** The placement of special academic programs within local schools has increased the diversity of those schools' student populations; but, in the absence of targeted mechanisms to integrate the program participants and non-participants, it has created conditions of within-school separation.

• **Recommendation 5:** Facilitate a process to devise strategies for fuller integration of special programs into the schools that house the programs to ensure that program participants and local or home school students have meaningful social and academic interactions, such as expanded use of specials or electives, common lunch or recess periods, and extracurricular programs; and that recruitment efforts are tailored to encourage home school populations to apply for the programs.

**Key Finding 6:** The MSMC has been more successful than the high school consortia (the DCC and the NEC) in promoting racial, ethnic, and socioeconomic diversity due in large part to shifting demographics as well as three programmatic elements: the MSMC, unlike the DCC and the NEC, does not utilize base areas, admits out-of-boundary students, and has developed and implemented distinct, whole-school themes.

- **Recommendation 6a:** Conduct a comprehensive review of the signature and academy themes offered in each DCC and NEC school to ensure they provide options that are consistent with the district's SPF and provide access to programs that would not otherwise be available in home schools, such as career education pathways.
- **Recommendation 6b:** Assess the feasibility and impact of revising the high school consortium model to reconsider the use of base areas and to allocate a number of seats for out-of-consortium students to enroll in signature programs and themes.

**Key Finding 7:** The overall demand for choice and special academic programs in MCPS exceeds the supply of seats in the programs.

• Recommendation 7: To the extent that MCPS invests in expanding seat capacity in choice and special programs to catch up with growth in district enrollment and demand, it should ensure that these efforts are aligned with the district's core values, including equity, and consider a wider variety of models, such as dual language and whole-school, theme-based magnet programs that use lottery admissions processes that rely primarily on student interest.

## Education Strategy Group Career Readiness External Review: Preparing All Students for Economic & Career Success Recommendations

## Focus Area #1: Vision and Systemic Priorities for Career Readiness

MCPS must partner with industry and postsecondary leaders to establish career readiness as a priority in preparing students for postsecondary success.

- Establish a new vision for career readiness that complements MCPS's college-ready goals.
- Redefine and rebrand CTE as offering rigorous academic coursework integrated with 21<sup>st</sup> century technical instruction and real-world work experiences.
- Design and provide professional development on the regional labor market and the related high-value career opportunities to teachers, counselors, and administrators to help them understand, the range of meaningful professional roles available after high school.
- Establish metrics for career readiness success to undergird the importance of the work, including program of study completion in high-skill, high-demand fields; work-based learning participation; dual credit rates; and attainment of industry-recognized credentials with labor market value.

## Focus Area #2 Employer Engagement/Demand-Driven Programming

Employers must become strong partners in realizing MCPS's new vision Of career readiness, which includes having the opportunity to help identify programs of study that should be prioritized and scaled and assess their effectiveness.

- Regularly convene leading employers through a specialized Advisory Council led by the Superintendent to identify programmatic priorities for the district and set direction for the work of the current intermediary organizations.
- Restructure and redefine the role of the Montgomery County Collaboration Board (MCCB) so it can
  more effectively ensure that career preparation programs are targeted in the right career sectors and
  are achieving results.
- Establish a single point of contact within MCPS for employers, a "Director of Strategic Industry Partnerships", to manage the work of the Council and build a full portfolio of work-based learning experiences for students.

#### Focus Area #3 Quality and Rigor of CTE

Once the new vision for career readiness has been established, MCPS must leverage the work of the Superintendent's Advisory Council to strengthen the quality and consistency of its career programming. The district needs to ensure that programs of study are rigorous and enable students to graduate with college credit and postsecondary-level industry-recognized credentials.

- Design and execute a systematic approach to the delivery of career programming across schools ensuring that every student has access to a high-quality program of study of his/her choice.
- Redesign Programs of Study so that they offer honors and college-level course-taking opportunities through grade 14 and integrate rigorous and relevant work-based learning experiences.
- Reorganize CTE under one central leader with deep knowledge of the district's academic and technical priorities and the acumen to execute on the new career readiness vision.
- Reconfigure the district's accountability system so that values program of study completion and attainment of college credit and stackable credentials.

#### Focus Area #4: Thomas Edison HS of Technology

The new Edison currently under construction makes room for change and MCPS should take this opportunity to address shortcomings in the current model, situating the new school as an integral piece of the career readiness vision. There are four paths to consider, each of which requires converting Edison into a full-time school:

- 4
- Create a CTE Early College High School that, like other Early College High Schools, would enable students to simultaneously earn a high school diploma and either an associate degree or up to two years of credit toward a bachelor's degree.
- Design a Wall-to-Wall Career Academy that would be divided into a number of high-skill, high-demand "academies"; each student would "major" in an academy and receive rigorous academic and technical instruction culminating in college-credit and a postsecondary industry-recognized credential.
- Combine Edison and Wheaton, taking advantage of the natural opportunity of side-by-side campuses to offer a rigorous project-based learning experience alongside sophisticated hands-on technical instruction.
- Convert to a technology high school taking care to assess programmatic offerings and their quality carefully to ensure high quality and develop a strategic plan for implementation with postsecondary and industry partners.

#### Focus Area #5: Stakeholder Understanding

Leveraging external professionals, MCPS must clearly and widely communicate to help stakeholders understand the importance of its career readiness work. This can happen through deliberate phasing:

- Establish a new value proposition for career readiness that educates stakeholders on recent economic changes and the related implications for career opportunities.
- Implement a branding campaign that brings to life MCPS's new career readiness vision that integrates and values career preparation alongside college preparation.
- Make the case for high-quality CTE as a component of career readiness explaining what CTE entails, delineating CTE offerings and their connection to postsecondary options, targeting long-held misconceptions about CTE quality, and advertising recent CTE changes to ensure unassailable quality.

## Montgomery County Public Schools

## STRATEGIC PLAN

#### Vision

We inspire learning by providing the greatest public education to each and every student.

#### Mission

Every student will have the academic, creative problem solving, and social emotional skills to be successful in college and career.

#### Strategic Objective

Graduate students who have the knowledge and skills to qualify for and succeed in entry-level jobs or credit-bearing postsecondary coursework, without the need for remediation.

## CAREER READINESS INITIATIVE



MCPS offers strong academics and real-world professional experiences so students can design their own future and stand out among the best.

#### **Guiding Principles**

- EVERY student will have equitable access to a strong academic foundation and high-quality career-related experiences that prepare them for college and lifelong career success.
- MCPS will prepare EVERY student for a wide range of postsecondary options that are driven by ever-evolving labor market needs and student interests and goals.
- A systematic approach to partnering with employers and higher-education institutions is critical to the success of MCPS's efforts to prepare students for economic and career success.
- Students and families will have multiple touch points throughout PreK-12 to ensure they are aware of the importance of career readiness, the portfolio of MCPS career readiness pathways, the full span of postsecondary credentials and industry certifications, and the broad array of career opportunities.

Montgomeryschoolsmd.org/Career-Readiness



OUR FUTURE

# Montgomery County Public Schools

Strong academics and real-world professional experiences so students can design their own future and stand out among the best.

## WHAT ARE CAREER READINESS PROGRAMS?

Career readiness programs combine strong academics with technical skills and real-world professional experiences that give students a competitive advantage for college and lifelong career success.

CAREER READINESS PROGRAMS COMBINE









INDUSTRY CERTIFICATIONS

Each MCPS high school offers rigorous programs where students explore their interests and get a head start on reaching their career and college goals. For a full list of programs, visit MONTGOMERYSCHOOLSMD.ORG/CAREER-READINESS.

#### WHY CAREER READINESS?

MCPS recognizes that as the economy, the cost of college, and the labor market continue to change, a more comprehensive approach in high school is needed to ensure every graduate leaves prepared for their next step.

## CAREER READINESS PROGRAMS HELP STUDENTS DESIGN THEIR OWN FUTURE BY

- · Offering a combination of both college-level and career readiness courses
- Providing relevant experiences and internships where students learn skills that make them more marketable to employers

# STUDENTS WILL LEAVE HIGH SCHOOL WITH MORE OPTIONS AND BETTER EQUIPPED TO NAVIGATE CHANGES THAT INCLUDE

- Growth in IT, engineering, business management, health care, biosciences, hospitality, public service, and other high-demand industries
- · More career opportunities for skilled technical workers with some level of postsecondary education
- Higher college costs and more student debt

## IN THEIR OWN WORDS

Graduates of MCPS credit career readiness programs with their success.

- \*I had AP courses like everyone else, but my paid internship experience helped me stand out from the pack on college applications and gave me an edge in college, in business school, and in my career in finance.
- \*\*Not only did I learn advanced programming, but I also learned how to collaborate and work on teams. I apply what I learned in high school every day as a software engineer at Amazon.
- If By the time I graduated from college I had six years of bioscience experience, including the NIH internship I had in high school. That gave me a real advantage over my college classmates when we interviewed for jobs.

Montgomeryschoolsmd.org/Career-Readiness

| High School Strategic Plan Stakeholder Engagement 2018–2019 |   |   |
|---|---|---|
| Date  | Topic   | Audience  |
| July 26, 2018   | Career Programs and Vision for TEHST                | Career and Technology Teachers                                  |
| August 15, 2018   | Career Programs and Vision for TEHST                | Career and Technology Teachers                                  |
| November 26, 2018   | High School Strategic Planning and Career Programs  | Parents and Community (Community Conversation #1)               |
| December 5, 2018  | Thomas Edison High School of Technology (TEHST)     | High School Principals (Professional Learning Community )       |
| December 5, 2018  | Vision for TEHST                                    | Career and Technology Education Resource Teachers               |
| December 5, 2018  | Career Programs and Vision for TEHST                | Community Leaders   |
| December 6, 2018  | Career Programs and Vision for TEHST                | Business Partners   |
| December 6, 2018  | Career Programs and Vision for TEHST                | Central Office Administrators                                   |
| December 6, 2018  | Career Programs and Vision for TEHST                | TEHST Staff and Administrators                                  |
| December 12, 2018   | Career Programs and Vision for TEHST                | High School Resource Counselors                                 |
| December 14, 2018   | Career Programs and Vision for TEHST                | Middle School Resource Counselors                               |
| January 9, 2019   | Career Programs and Vision for TEHST                | College & Career Information Coordinators                       |
| January 16, 2019  | Vision for TEHST and High School Strategic Planning | Councils on Teaching and Learning                               |
| January 17, 2019  | Vision for TEHST and High School Strategic Planning | Pupil Personnel Workers   |
| January 17, 2019  | Vision for TEHST and High School Strategic Planning | Parent Community Coordinators                                   |
| January 24, 2019  | Vision for TEHST and High School Strategic Planning | Curriculum Advisory Assembly                                    |
| February 11, 2019   | High School Strategic Planning and Career Programs  | Parents and Community (Community Conversation #2)               |
| February 20, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, John F. Kennedy High School                |
| February 27, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, Walter Johnson High School                 |
| March 5, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, Sherwood High School                       |
| March 6, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, Julius West Middle School                  |
| March 7, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, Quince Orchard High School                 |
| March 7, 2019   | High School Strategic Planning and Career Programs  | Student Focus Group, Montgomery Village Middle School           |
| March 13, 2019  | High School Strategic Planning and Career Programs  | Montgomery County Council of PTAs (MCCPTA) Gifted Child Com.    |
| March 15, 2019  | High School Strategic Planning and Career Programs  | High School Counselors  |
| March 22, 2019  | High School Strategic Planning and Career Programs  | Associations/Deputy Superintendents/Chief Operating Officer     |
| March 27, 2019  | High School Strategic Planning and Career Programs  | Choice Multi-stakeholder Group                                  |
| March 27, 2019  | High School Strategic Planning and Career Programs  | MCCPTA Focus Group  |
| March – May 2019  | Designs for Regional Programs                       | Central Office and School Staff (Wheaton, Seneca Valley, TEHST) |
| April 3, 2019   | High School Strategic Planning and Career Programs  | Community Focus Group (APASAG, LSAAG, AASAG, CAPA, SEAC, NAACP) |
| April 8, 2019   | High School Strategic Planning and Career Programs  | Parents and Community (Community Conversation #3)               |
| April 16, 2019  | Vision for TEHST and High School Strategic Planning | Edison Multi-stakeholder Workgroup                              |
| May 1, 2019   | High School Strategic Planning and Career Programs  | Parents and Community (Community Conversation #4)               |
| May 15, 2019  | High School Strategic Planning and Career Programs  | High School Councils on Teaching and Learning                   |

## Stakeholder Interests Related to High School Program Options

General Reactions: "More opportunities for students; more students have opportunities." "Long-range vision for program placement or alignment."

## **General Themes in Feedback (with examples of comments)**

#### Equity of access to countywide and regional programs

- More programs to provide access to all students
- Have opportunity to participate--offer at every school building or use online/technology or use regional model.
- Regional high school, because all high schools cannot feasibly be the same and offer the same programs

## Comparable programs around the county

- International studies
- Entrepreneurial opportunities
- More IB programs
- More programs that can get students jobs right after high school
- More opportunities for programs similar to Edison at home schools, e.g., Magruder / Aviation program pilot strategies/airplane mechanics
- Create more opportunities at more schools
- Design thinking, required Theater, art, and music
- Arts and languages center
- STEAM program

#### Balanced offerings in local schools

- A more balanced education experience, an infusion of career education, sciences, liberal arts
- Well-rounded education experience of subjects and career readiness experiences
- Every school should have art, music, languages, and technology
- Career development programs, full range of academic courses
- Both advanced and on level courses
- World languages, immersion, biliteracy
- Work and community-based learning
- Investing, finance management, budgeting
- Courses cover topics that are not just from a non-White, non-Euro-centric perspective
- Philosophy/epistemology/critical thinking
- Coursework is not driven solely be the influence of highly selective colleges

#### Accountability

- Criteria for assessing student and program outcomes to evaluate success
- Monitoring program integrity

## High expectations with support

- Options for all students
- Support for students striving to meet their potential
- Balanced approach—don't push too hard, too fast

## **Constraints Mentioned in Feedback**

## **Design**

- Need to restructure
- Institutional inertia
- Current boundary structure

#### County

- Size of county and housing patterns
- Location of businesses, professional centers (for student access to internships)
- Roads, public transportation
- East-west divide in resources

## **Funding**

- Budget—county should get fair share of state funds
- Land costs
- Manage for success—provide funds needed to succeed.

## Transportation

- Long rides, cost
- Equity
- Activity busses

#### School buildings

- Capacity, design
- Number, locations

## Selection

- Increase seats
- Lack of student diversity in programs
- Make access easier for more kids

#### Communication

- Disseminate choices in curriculum and programs
- Parent outreach (communications in multiple languages, formats, events, times, places)

## **Instruction**

- Time spent preparing for standardized tests
- School-based/community-based learning in silos

#### Student Sense of Belonging

• Kids not attending home schools makes it harder to build community

## Reality/Feasibility

- Students have to make choices, sometimes earlier than they are ready.
- How to serve every student
- Provide training and support to ensure programs/processes implemented as planned.

## **Feedback about Programs**

#### **Dual Enrollment**

- Offer more widely
- Worried about high school students on college campuses, following college schedules
- Like idea of dual enrollment in high school setting
- Concerns about college teachers replacing MCPS teachers—quality of college teachers; staffing/contract implications
- Offer dual enrollment opportunities, but don't let it be the only way a student can pursue challenging instruction
- Don't let college courses replace good, challenging/nurturing high school courses

#### **Career Programs**

- Meet the needs of all students—challenge and support all; don't water down experiences, but help students meet the high expectations of industry.
- Help students who have to work during high school to assist their families.
- Offer high industry demand career programs, including the trades.
- Make sure students who want to take AP or IB courses and want to complete a career program have that option in their schedules.
- Pay attention to implications of state requirements for completing a program and meeting college requirements—ensure flexibility for students.
- On and off ramps—build in flexibility for students who discover new interests. Create many ways and times to enter a program. Consider how students may change or leave programs without penalty.
- Consider schedules of English language learners and students with disabilities—extra classes make it difficult to fit career programs into their schedules.
- Offer more than STEM and high-tech options.

#### Criteria-based Programs

- Expanding programs, increasing seats is welcome news.
- As programs are expanded and new locations added, ensure all programs in the same category follow the same model.
- Support programs opened in new locations to promote program integrity—provide professional development and other resources as needed.
- Set a pace that the district can manage to ensure success over the long haul.
- Remember the arts, languages, humanities, design, and creativity as you open new programs.

#### **Strong Local Schools**

- Promoting and marketing strong local programs is a good goal.
- Help all schools meet their students' needs.

#### Feedback about Processes

## Marketing, Application, Notice

- Inform parents and students early about available options—start in 7<sup>th</sup> grade for programs students will decide to apply to when they are in 8<sup>th</sup> grade.
- Consider how to generate interest and understanding of options/benefits/demands early—start as early as elementary school with parents and students.
- Build outreach methods that include underrepresented groups.
- A one-time marketing window for all available options is a great upgrade.
- Plans for a common application are good idea.
- Notification about status of all applications at one time will help.
- Be clear and consistent. Avoid jargon.
- Show students and parents the benefits.
- Consider regional open houses.
- Use student-friendly videos to promote programs.

#### Selection

- Be transparent.
- Promote equity.
- Explain how it works.
- Tell students and parents in advance about the process.
- Help families and students understand.

#### Universal Review in Grade 8

- Giving families information about student's achievement, interests, and mindset will be very helpful as they talk about program options in high school.
- It is good to give high schools the same information about their students when they start high school.
- Make sure that people understand there is flexibility in registering for courses, so students don't take on too much challenge and so they match their courses to their interests.

#### Pipeline

- Prepare students for options that they will have available to them in high school.
- Build awareness, interest, skills, and knowledge strategically; be mindful of schools that feed to specific programs.
- Use middle school to start to explore, looking at options that best meet students' strengths and interests.
- Use Naviance to help parents and students build awareness of students' interests and available programs.

## Feedback about Desired Skills, Knowledge, and Abilities

## Academic and Career Skills and Knowledge

- Variety of skills
- Arts—ability and appreciation
- Debate and dialogue
- Strong Academics
- Financial literacy
- Public speaking
- Good writing and communication skills in English and in another language
- Practical knowledge

## Life Skills--for college, workforce, life, learning throughout life

- Awareness of options for continued learning
- Problem solving– working towards solutions
- Critical thinking
- Ability to analyze/synthesize information
- Intellectual curiosity, creativity
- Ability to seek knowledge
- Excitement for learning

## Self-Management

- Good character
- Managing emotions, time, motivation, study/work habits
- Socio-emotional stability prepared for various life challenges
- Open-mindedness
- Pride
- Determination
- Self-reliance
- Accountability
- Confidence
- Strong sense of self, comfortable in his/her own skin
- Sense of purpose
- Independence
- Awareness of strengths
- Preparation to make transition to adulthood
- Openness to possibilities
- Initiative

#### **Interpersonal Abilities**

- Respect for diverse ideas and experiences
- Global citizenship
- Leadership
- Value different cultures
- Community orientation
- Collaboration

## **More Specific Feedback Provided**

## Use of Time

- Openness in schedule
- Block scheduling
- Year-round school
- Summer and evening options

#### Use of Space

- Schools should look like where students will work technology
- Project labs
- More computer labs in schools
- HS experience in proximity to professions
- Time off campus—field experiences

#### Instruction Outside the School

- Online courses, elective modules taught online
- Outside modules taught by industry professionals, college teachers
- Logging into a computer and working with a teacher not present on campus
- Distance learning
- Experiential work-based learning
- Learning on college campus
- More outside time (nature classes)
- Mentorships

#### Business/school connection

- Businesses partnering
- Apprenticeships
- Rotating internships with different companies
- Outside classroom experiential learning at worksite
- Businesses and companies a part of the experience.

## Career Exploration and Development

- Job training
- At least one more Edison, maybe two
- Student job-ready right after high school, pathway that leads directly to work
- Career pathways, certification

## Connecting Academic and Career Skills/Knowledge

- Career-based academics
- Make connections between classroom learning and career opportunities
- Offer challenges and competitions, cross-subject projects
- Create schools with both AP classes and career classes; don't emphasize one or the other

#### School Culture

- High school doesn't align with real world. Need a fundamental shift in school view. Schools now are the center of the universe. Students should be the center.
- Balance structure and choice
- Support students who need help to succeed
- Kids encouraged to find classes that interest them
- Flexibility--ensure students don't feel pigeonholed, stuck in a track.
- More clubs and after school activities
- Have a champion adult no matter how large the school
- Safe, respectful, and dignified learning environment
- Students have a group of peers in each class with common interests and level
- Robust mentorship and tutoring

#### Instruction

- Teach to the child
- Project-based learning
- Varied
- Hands-on
- Collaborative/team learning
- Movement in class
- Group discussions and learning
- Self-directed learning and projects
- Senior project
- Less lecturing
- Incorporate Chrome books into teaching
- Encourage questioning
- Student choice--students create their own learning journey
- Small group experiences
- Long-term projects
- Not on a computer all day
- Independent study options

## Viable Options for Thomas Edison High School of Technology Based on Current Conditions

"The newly rebuilt Edison is an opportunity for change and reinvention. MCPS should take this opportunity to address shortcomings in the current model, situating the new school as an integral piece of the district's career readiness vision that offers a full-time, comprehensive student experience." –Education Strategy Group External Review

Model 1 CTE Early College High School

Model 2
Edison
Wall-to-Wall
Career
Academy

Model 3
EdisonWheaton
Partnership

Model 4
Full-Time
Technology
High School

Models 1 and 2 are the only two options for Thomas Edison High School of Technology (TEHST) since the new building was not built to accommodate a comprehensive high school program; the building does not include a cafeteria, auditorium, gymnasium, or instructional spaces for core subjects, physical education, and the arts,. A Wall-to-Wall Career Academy model can only work at TEHST in partnership with Wheaton High School. –Education Strategy Group 20182019

## Top 10 Industries with High Labor Market Demand

## **Key Industries**

- Biotechnology
- Agribusiness, Natural Resources, and Energy (Green Industries)
- Healthcare and Health Services
- Information Technology and Cybersecurity
- Advanced Manufacturing and Engineering
- Construction Trades
- Mechanics and Technicians
- Hospitality Management
- Banking, Finance, and Business Services
- Human Resource Services (Education, Law Enforcement and Fire)

## **High Demand Local Hiring Agencies**

- Federal government
- Military
- Entrepreneurship
- Non-profits
- Major headquarters