Today’s Discussion

• Introduction, Background, Context
• History of the MCPS CTE External Review
• Findings
• Recommendations
• Next Steps for MCPS
High-Paying Trade Jobs Sit Empty, While High School Grads Line Up For University

Reframing how we talk about career and technical education

The New York Times

Building Skills Outside the Classroom With New Ways of Learning

MCPS Montgomery County Public Schools

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Building Skills Outside the Classroom With New Ways of Learning

MCPS Montgomery County Public Schools
Reasons to Reflect, Re-Assess, and Re-Strategize in K–12

- The Economy Has Changed
- College Has Changed
- Career Opportunities Have Changed
MCPS Has Been Ahead of this Economic Curve

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Challenge Facing MCPS: Postsecondary Preparation

College Ready ⭐ Good Jobs Ready

⭐ALL MCPS GRADUATES
External Review: The Charge

• Rigorously assess MCPS career readiness efforts, including CTE Programs of Study

• Determine the extent to which programs are:
  • Demand-driven
  • Shaped by employers
  • Rigorous and relevant
  • Fully utilized
  • Effective vehicles for preparing all students for postsecondary success
External Review

• Request for Proposals (RFP) 2016-17
• Education Strategy Group (ESG) awarded
• Data analysis, program review, deep stakeholder interactions
• Report presented to the Board of Education September 2017
• Short term and long term actions
Key Outcomes of Data Analysis

- CTE enrollment was declining in MCPS but is rising in all comparison districts.
- Clear consensus among students, parents, and staff that students must continue education and training beyond high school.
- Knowledge of future economic credential demands is underdeveloped.
**Key Outcomes of Data Analysis**

- Large appetite for more information on career prep opportunities in MCPS
- Few students and parents are interested in the CTE high school (Thomas Edison)
- Overwhelmingly, business and industry want to help more with these efforts.
Key Findings of Report: Five Focus Areas

1. Employer Engagement
2. Quality and Rigor of Programs
3. The Edison Model
4. Vision & Systemic Priorities for Career Readiness
5. Students Ready for College and Good Jobs
6. Stakeholder Awareness of Career Readiness
Findings
Focus Area 1: Vision & Systemic Priorities for Career Readiness

- **High Expectations**: District administrators & school-based staff are clearly committed to high expectations and outcomes for all students.

- **Narrow Focus**: Those high expectations are almost exclusively aimed at a 4-year college experience after high school, which, while very important, marginalizes career preparation efforts and undervalues dual college-ready AND career-ready accomplishments.

- **Checkbox Approach**: The strong focus on preparing for 4-year college has also contributed in part to checking off graduation requirements rather than thinking more strategically about students’ futures and how their high school experience can shape that.

- **Fragmented Organization**: This gap in strategic vision can be attributed in part to both educators’ lack of experience with high-quality, 21st century career preparation and the fragmented way in which CTE is situated in the district office; it’s a division without a home that lacks clear direction.

- **Signaling Priorities**: System drivers and accountability continue to emphasize raising the graduation and 4-year college-going rates. Absent from metrics are high-quality career readiness indicators that can and should play a complementary role in MCPS’s work.
Focus Area 2: Employer Engagement

+ **Strong Recognition**: MCPS clearly recognizes the need to meaningfully engage key employers to ensure alignment between programs and the economic development needs of the county to prepare students for future opportunities.

- **Limited Connection**: Yet it lacks a systemic way in which to connect with the employer community. Instead, existing intermediary organizations serve different purposes and functions, which has created fragmented engagement and confusion among employers.

- **Not Yet Employer-Led**: While MCPS consistently engages employers through several channels, employers feel they are being informed rather than empowered to help shape and assess policies and programs.

- **Underdeveloped Real-World Tie**: Beyond the challenges of engaging employers at the policy level, employers are underutilized in connecting classroom learning with the world of work.

- **Employer K-12 Attitude**: Employers seem to largely undervalue K-12, often perceiving it as a philanthropic endeavor rather than a talent-development strategy.
Focus Area 3: Quality and Rigor of CTE

+ **Strong Building Blocks**: MCPS should rightfully boast that it has POS that are anchored in IRCs; a technical career advisement platform; school-based internship coordinators; and dedicated staff, all of which are needed to create a high-quality, district-wide career preparation system.

- **Uneven POS Distribution**: Yet the Programs of Study (POS) are offered unevenly across the district with a smorgasbord popping up within schools seemingly without intentionality, creating equity, awareness, and interest challenges. This contributes to students and parents often perceiving POS as having limited value.

- **Lack of Postsecondary Link**: High-quality POS must include postsecondary-level instruction. This requires a shared vision for a 9-14 delivery system inclusive of dual enrollment/credit and opportunities for attainment of postsecondary-level IRCs that is currently underdeveloped.

- **Underdeveloped POS Components**: Further, neither work-based learning nor career advisement have been optimized to date. Though the high school internship program has impressive potential, it lacks coordination, clear standards, and industry-aligned opportunities. And, important functionality of Naviance for career planning beginning in middle school is underutilized, though good early work is happening.

- **Limited CTE Market Share**: As a contextual challenge to address, CTE is inherently at a disadvantage for enrollees. It is often viewed as one elective of many choices rather than a pathway to a valuable postsecondary opportunity.
Focus Area 4: Edison School of Technology

+ **Clear Focus:** Edison consistently demonstrates a relentless focus on preparing students for specific career opportunities after high school.

- **Unknown Opportunity:** Edison is largely unknown, with stakeholders holding only a vague idea of what the school does and how well it does it.

- **Quality Perception:** Stakeholders express concern that it is a “lesser-than option” for students who don’t plan to go to college.

- **Problematic Model:** Students and parents are largely unwilling to lose a class period daily to travel to a part-time program that offers a partial high school experience.

- **Lack of Vision:** There doesn’t appear to be a common vision for how Edison fits into the broader MCPS strategy, and there is similar confusion regarding how the new Edison will be different.
Focus Area 5: Stakeholder Awareness

- **Belief in Postsecondary Value**: MCPS Students, parents, faculty, and staff uniformly understand and believe in the value of a 4-year college degree.

- **Misunderstanding of Economic Opportunity**: Across all MCPS stakeholders — students, parents, teachers, counselors, administrators - there is little awareness of how labor market shifts have created a more diverse range of economic and career opportunities, especially valuable “new-collar” jobs.

- **Scarcity of Information**: Relatedly, because little information on career preparation for these opportunities has made its way to students, teachers, counselors, and parents, there is a discernible lack of understanding regarding career readiness and its goals.

- **Limited Understanding of CTE**: Most stakeholders don’t understand what CTE is, often associating it with outdated vocational education. Yet they cite programs like NAF, PLTW, and Cisco as being very strong college prep opportunities without knowing that they are CTE programs of study. Students, parents, faculty, and staff generally lack understanding of CTE and how high-quality CTE can be an effective strategy to prepare students for college.
Recommendations
Focus Area 1 Recommendations:
Vision & Systemic Priorities for Career Readiness

First and foremost, MCPS must take steps to establish career readiness as a priority in preparing students for postsecondary success. Each of the steps articulated below requires committed partnership with industry and postsecondary leaders.

• **Establish a New Vision for Career Readiness** that compliments MCPS’s college-ready goals.

• **Redefine and Rebrand CTE** as offering rigorous academic coursework integrated with 21st century technical instruction and real-world work experiences.

• **Design and Provide Professional Development** on the regional labor market to educators, counselors, teachers, and administrators on high-value career opportunities within the region.

• **Establish Metrics for Career Readiness Success** to undergird the importance of the work, including POS completion in high-skill, high-demand fields; work-based learning participation; dual credit rates; and attainment of IRCs.
Focus Area 2 Recommendations: Employer Engagement

Employers must become strong partners in realizing this new vision of career readiness, which includes giving them the opportunity to identify Programs of Study that should be prioritized and scaled and assess their effectiveness.

- **Convene Leading Employers**: To accomplish this, the superintendent should regularly convene leading industry executives via a specialized Advisory Council to identify programmatic priorities for the district and set the direction for the work of the current intermediary organizations.

- **Restructure MCCB**: This will then provide opportunity to redefine the role of the MCCB to carry out the recommendations of the Superintendent’s Advisory Council so it can play a more effective role in ensuring that programs are targeted in the right career sectors and are achieving results.

- **Single Point of Contact**: Finally, a “Director of Strategic Industry Partnerships” is needed to manage the work of the Council and build a full portfolio of work-based learning experiences for students.
Focus Area 3 Recommendations: Quality and Rigor of Career Programming

Once the new vision has been established, MCPS must strengthen the quality and consistency of its career programming ensuring that POS are rigorous and enable students to graduate with college credit and postsecondary-level IRCs.

- **Systematic Approach**: Leveraging the work of the Advisory Council, design and execute a systematic approach to the delivery of career programming across schools, ensuring that every student has access to a high-quality POS of his/her choice.

- **POS Quality**: To achieve quality, redesign POS offering honors and college-level course-taking opportunities through grade 14; identify students’ academic and career interests, and integrate work-based learning experiences aligned with those interests.

- **Organizational Structure**: Leadership matters in charting new direction; reorganizing 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 will be pivotal.

- **Accountability Redesign**: To drive changes in quality and practice, reconfigure MCPS’s accountability system so that it values completion of high-quality POS and attainment of college credit and stackable IRCs.
Focus Area 4 Recommendations: Re-invention of Edison School of Technology

The newly-built Edison gives 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 career readiness vision. There are four paths to consider, each of which requires conversion into a full-time school:

• **CTE Early College High School:** Like other ECHS, this model would enable students to simultaneously earn a high school diploma and either an associate’s degree or up to two years of credit toward a bachelor’s degree. With an exclusive focus on high-skill, high-demand industry sectors, students could also earn a postsecondary-level IRC.

• **Wall-to-Wall Career Academy:** Under this model, the school 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 IRC.

• **Combined Model:** MCPS might take advantage of the natural opportunity of side-by-side campuses by combining Wheaton and Edison High Schools to offer a rigorous project-based learning experience alongside sophisticated hands-on technical instruction.

• **Technology High School:** Perhaps the simplest high-potential transformation would be converting Edison into a fulltime technical high school. To achieve stronger results and higher enrollment, programmatic offerings and their quality would need to be assessed carefully and a strategic plan for implementation be developed with postsecondary and industry partners.
Focus Area 5 Recommendations:
Stakeholder Awareness of Career Readiness

Once these other pieces are in place, MCPS must clearly, strongly, and widely communicate to help stakeholders understand the importance of its career readiness work. This can happen through deliberate phasing:

• **Stage 1: Generate Understanding:** MCPS must establish a new value proposition through an external communications/branding campaign that educates stakeholders on recent economic changes and the related implications for career opportunities.

• **Stage 2: Raise Awareness of Vision:** Next, that branding campaign should bring to life MCPS’s new vision of career readiness that integrates and values career preparation alongside college preparation.

• **Stage 3: Make a Case for CTE:** Finally, that branding campaign will need to establish the link between high-quality CTE and 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.
Next Steps
Stakeholder Involvement

• Engagement Sessions

• Multistakeholder Retreat

• Joint Boards Retreat
  o Board of Education
  o The Universities at Shady Grove
  o Montgomery College
Overview

Vision
Branding & Marketing
Program Changes
Upcoming Actions
Vision

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 will 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 Guiding Principles

• *Every* student will have *equitable access* to a strong academic foundation and 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.
Guiding Principles

• A systematic approach to partnering with employers and higher education institutions is critical to the success of MCPS’ efforts to prepare students for economic and career success.

• Students and families will have multiple touch points throughout pre-K–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.
Graduate Profiles

Daniel Ansher

Occupation: Software engineer, Amazon
Education: Wootton HS (Academy of Information Technology), Georgia Tech
Read how MCPS gave Daniel Ansher an early edge through education and experience.

Besides being based in Santa Monica, what’s the coolest thing about your job?
There are so many things. I work on Amazon Prime Video and figure out ways to train computer models to detect any defects. My work impacts everything from Japanese anime shows to movies in Germany. I’m part of something that affects the entire world. Also, there’s a culture here that encourages risk-taking. If I have an idea that will benefit the company, I can go for it. If it pans out, great. If it fails, that’s okay too. Read More and Watch the Video.

Natasha Ghatak

Read how MCPS gave Natasha Ghatak an early edge through education and experience.

You work in the financial industry. Can you explain what you do?
My company works with banks and other financial institutions to help them follow the rules set by the government to ensure a safe and sound financial system. We're kind of like bank doctors. Any time a bank is in trouble, we come in to help them. For example, in money-laundering situations, we help banks figure out who the bad guys are so that they don’t accidentally open accounts that might be funding illegal activities. My current position is in business development. I look for new banks to help. Read More and Watch the Video.
Because of the AP programming classes I took at Wootton, I was far ahead of my college classmates who struggled with computer science in the beginning. I have a great job today because of what I learned and the experiences I had in high school.

Daniel Ansher
Thomas S. Wootton HS
Academy of IT
Software engineer
Amazon
In college, time is money. Because of my high school experience I knew teaching was the field for me. Some of my friends wasted three years in the wrong major because they didn’t have the kind of real-world exposure I had before I even went to college.

Amy Wynant
Thomas S. Wootton HS
Early Child Development
Kindergarten teacher
Stone Mill ES
Branding & Marketing

Value Proposition

STRONG ACADEMICS AND REAL-WORLD PROFESSIONAL EXPERIENCES TO STUDENTS CAN DESIGN THEIR OWN FUTURE AND STAND OUT AMONG THE BEST.
Branding & Marketing

**STRONG ACADEMICS AND REAL-WORLD PROFESSIONAL EXPERIENCES TO STUDENTS CAN DESIGN THEIR OWN FUTURE AND STAND OUT AMONG THE BEST.**
Strong academics and real-world professional experiences so students can design their own future and stand out among the best.

ENGLISH TEACHER
Walt Whitman High School

MY EDGE was the early exposure to teaching in the Sherwood program. It’s where I learned patience and how to be very organized. I was definitely more prepared than my college classmates and the experience continues to help me every day as a teacher.

Omari James
Sherwood High School
Early Childhood Development Program
• University of Maryland

Montgomeryschoolsmd.org/Career-Readiness
Social Media

4K reach, with 188 reactions, comments and shares

1.7 percent engagement, reaching nearly 11,000 people
High School Program Changes

- PTECH Network Operations
- Aviation and Aerospace
- IB Career-related Programme
- Fire Science & Rescue
- Early College Secondary Mathematics
- Law Enforcement & Leadership
- Cybersecurity Capstone
- Medicine and Health Science
Middle School Program Changes

Ramping up in Middle School

• Naviance
• Grade 8
  o Transition to high school plan
• Grade 7
  o Junior Achievement Finance Park at Edison
Upcoming Actions

• Focus Area 1: **Vision**
  o Professional learning

• Focus Area 2: **Employer Engagement**
  o Strategic Industry Partnership Supervisor
  o Superintendent’s Employer Advisory Council

• Focus Area 3: **Quality & Rigor**
  o Program redesign, phase out, redesign, and placement

• Focus Area 4: **Thomas Edison High School of Technology**
  o Workgroup

• Focus Area 5: **Stakeholder Understanding**
  o Website, branding, resources, parent and community outreach
Discussion

Q & A
Resources:

Career Readiness External Review Report

Presentation to the Board of Education

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