



An Update on Career and Technical Education in Baltimore: During Pandemic and the Vision Moving Forward

Monday, September 21 | 12:30 – 1:30 PM

Takeaways and Next Steps

- Ways philanthropy can help in implementation of the plan:
 - Embedding some of the shorter-term certifications
 - Creative work-based learning opportunities
 - Providing heavy-duty laptops capable of engineering and computer-aided design software
- Share any feedback you have on [the slides and presentation](#), connections, and relevant resources with Office of College and Career Readiness
 - To reduce a barrage of emails, [share feedback with Joyce](#) who will compile and send to Dr. Pfeifer and Director Vines

Summary

Director Vines reviewed the **Career and Technical Education Content**. In addition to Director Vines' role, the office has brought on a work-based learning team to formalize the effort to link classrooms and hands-on work experiences. The goal is for programs to be equitably distributed across the city so that students can get there in a reasonable amount of time. They are also working to ensure programs meet needs of English language learners and students with IEPs. The district will face financial challenges, so they are thinking about how to efficiently use resources. They are committed to providing teachers, principals and schools enough support time and resources to help students prepare for a living wage occupation

The process is data-driven and they have been assisted in their work by [reports from Education Strategy Group \(ESG\) and The Fund for Educational Excellence](#). Currently, approximately 8% of students enrolled in a career and technical education pathway (CTE) gain a certification. Their focus is on increasing that number as much as possible to better help students into the workforce. It is essential that curriculum and courses match the local labor demand and workforce needs. Director Vines shared how they are factoring in student voice by looking at enrollment trends over the last several years. For pathways with low certification rates, they will increase the rigor to ensure students take the exams.

Before developing final recommendations, the Office of College and Career Readiness is incorporating stakeholder feedback. Director Vines detailed the phases of **City Schools' Process & Commitment to**

Mentioned Resources

Dr. Pfeifer and Director Vines' slide deck: [The Vision for Career Readiness in City Schools: Proposed Scenarios](#)

The Fund for Educational Excellence's [Broken Pathways: The Cracks in Career and Technical Education in Baltimore City Public Schools](#)

Education Strategy Group's [Preparing All Students for Economic and Career Success](#)

[Project Evident](#)

Community Input. Once they receive feedback, they will conduct feasibility assessments. An example is if they decide to move a culinary program to a high school with a small space—even if it makes the most sense—there could be real feasibility challenges from a facilities perspective (build-out, construction, etc).

Dr. Pfeifer spoke about re-envisioning career readiness in City Schools during the **Getting Us to Our Vision** portion of the slides. In previous years, CTE began to spread programs more widely in a way that reduced the resources programs were getting access to. When comparing city schools' CTE programming to programming in fellow districts across the country, it's clear that the city's offerings are not as robust as they need to be because they are spread too thin. Now the office is thinking through what a robust, meaningful CTE experience looks like for a young person.

One example is the early childhood pathway which currently leads to a 90-hour certification when a student finishes the program. That current certification does not lead students to a living wage. The office is recommending integrating the Early Childhood pathway with the Teacher Academy pathway. The Teacher Academy pathway leads to students earning a pair of professional certifications where students could be employed by city schools right at the completion of that program. This also expands the range of experiences to include early childhood without limiting them to it (could also include K through 12).

Another example is the nursing pathway. Currently, the nursing pathway leads to the certified nursing assistant certification. While this pathway is close, it still does not always lead to a living wage. Typically requires obtaining o get your GNA and PCT (patient care tech) certifications to earn more money. Many students don't continue and then get stuck. Dr. Pfeifer reminded members that—based on data from the class of 2009—six years after their graduation from city schools, the median income for graduates was \$15,000. The office is looking at how time can be used to move students toward being an LPN and perhaps get an additional credential in phlebotomy that would allow them to earn money along the way.

The work-based learning team that Kumasi mentioned has been one of the city's key investments: a work-based learning manager and three work-based learning specialists who are all tied to specific CTE pathways. Dr. Pfeifer's team is developing an MOU with MOED that would allow data sharing to access YouthWorks placements aligned to students' CTE pathways. Their office is proposing these shifts be finalized by the 2023 - 2024 school year.

As the district reviewed its equity policy, with an extra push from the State Department of Education through their civil rights review, they decided to eliminate entrance criteria for Mergenthaler Vocational-Technical (MerVo), Carver and Edmonson for the 2021 - 2022 school year. They are working with the Office of Special Education on how to prepare students while recognizing that students with disabilities—and in some cases, English learners as well—were not getting access to CTE programs.

While work-based learning is focusing initially on CTE, the vision is to expand work-based learning opportunities K through 12 so that the Office of College and Career Readiness can coordinate career talks, job shadows and provide more support at a central level. They are looking to speak with employers to ensure aligning with what students will need. This is work they want to do systematically, pathway by pathway. Currently, Dr. Pfeifer's team is doing this for IT pathways through a grant from JPMorgan, the Talent Ready grant. They have done a curriculum mapping—both for K through 12 curriculum and what's being taught at BCCC and the University of Baltimore—to ensure there's

alignment throughout. They want to make sure that certifications are the right ones so, in some case, certifications are going to be college credit. Project Lead the Way is a great example of that. In other cases, certifications are things that their office has put in place or MSDE has approved but local employers are not really jumping to hire students with those certifications.

Dr. Pfeifer emphasized that CTE is not the only way to ensure that students are career ready. There are several programs (like the phlebotomy program that BCCC runs and Renaissance Academy's 15-week course where students do clinical work and are able to get jobs working at labs drawing blood) that don't meet MSDE's four course CTE pathway requirements. For students who don't have time for four courses to pursue CTE, Dr. Pfeifer's team is looking at opportunities where students can get meaningful certifications during a work based learning period, during the school day, etc. that would allow them to be equipped to earn to earn some real money.

The Office of College and Career Readiness is still working on student plans for grades six through 12 so that each student will have an individualized student plan that allows them to have time with an adult one on one and walk through what their interests might be. The hope is to help students have those career conversations and career planning earlier on.

The rest of this presentation is focused specifically on lock teacher positions, district funded positions, that their office places in schools. Kumasi is taking the lead on this work which will think through what we want career readiness to look like across the board. Dr. Pfeifer shared the list of programming that they are looking to make shifts to over the next several years. Some programming will be sunset altogether. Other programming will be reduced or consolidated. In some cases, the pathway doesn't lead to a living wage and in other pathways it's because there's been lower participation and the district wants to right-size the number of programs.

Q&A

Does every pathway have a certification? What about pathways that lead to college entrance, do they lead to a certification too?

Not every CTE pathway has an industry-recognized credential. Programs that lead to college credit are included in our credential data. The team at [Project Evident](#) developed this data for each pathway we have here at City Schools. It's a lot of data and incredibly useful.

Does slide 8 mean that only students at Digital Harbor received certifications?

Yes, based on the data we have in this particular pathway, only students at Digital received certifications in that cohort.

The 8% certification number makes it sound worse than it really is, assuming you have included the students in pathways without certifications. Correct?

The broader concern is whether we're sending our students out with the recognized skills that will allow them to attain jobs. While our Career Research and Development pathway (for example) does not lead to a credential, it is also not providing students with specific skills needed for job attainment. We need to be accountable for the skills/readiness we're sending our students out with (though we know the credentials are not the ONLY factor involved).

Will CTE de-emphasize pathways like [Project Lead the Way \(PLTW\)](#) that are targeted towards college entry and focus on certifications that lead directly to jobs going forward? If that is the case, what is

City Schools' plan to backfill the gap that is created with this change in direction? I'm concerned there will be a significant reduction of PLTW in city schools.

One of the things we're looking at is efficiency of our programs. For our PLTW engineering programs, just to be specific, each of those programs—to run it well—costs \$100,000 annually. We currently have seven of those programs, several of which are serving fewer than 50 students. One of our schools serves fewer than 30. With each teaching position costing \$100,000 in addition to the amount that it takes to run a program, part of what we're looking at (not just in PLTW but across the board) is being more efficient in how we're using our teaching positions.

If we use our teaching positions more effectively, even if we reduce the number of schools that have a certain program, we can increase the number of students who can access that program. We can increase the number of seats just by where we place our programs and using resources in a more effective way. There are several factors that go into reducing the number of programs across the city but the reduction in the number of programs does not automatically mean a reduction in the number of students who can pursue it. One of the things that I think was most eye opening to me, as we worked with our Project Evident team to look at this data was that if we are more efficient, we can offer CTE to more students across the city. And, just to be clear, the college credit is counted as a credential. In this data, we also are accounting for programs like PLTW.

Any thoughts on the impact of the MTA cuts to access to programs?

Have not analyzed the full impact for all our students yet, but we already know that it will have an impact on students just in getting to school. If we're talking about students needing transportation to get to work-based learning programs or you know, additional opportunities, it's going to exacerbate that.

Have you engaged the local and state workforce development folks in the review process?

We are working closely with MOED and have an upcoming meeting with a state-level group that Senator McCray connected us with. We also shared some of this with some members of the GBC staff.

Could there be opportunities to use our new "expertise" in remote learning to expand the number of students who can access programs?

Yes. We'll take the lessons learned from this time to see how we can utilize virtual learning going forward. It really can expand our resources. For example, our Work Based Learning team can host industry speakers, conduct interview prep, teach office attire, etc. remotely and reach way more students. Some program classes, of course, are harder than others to do remotely, but we're discovering what works well and what's more challenging in reaching students across the district.

Can you talk about the intersection of P-Tech and CTE and college prep?

We have three P-Tech programs in the city. Carver's program is computer science with IBM as an industry partner. Dunbar's program is related to health sciences, and that's with Hopkins, Kaiser Permanente and the University of Maryland, Baltimore. New Era's program is focused on transportation technologies, and the port is the partner there. For those who are not familiar, P-Tech is a program that allows students to earn an associate's degree at the same time they're earning their high school degree. As students take CTE courses in those specific areas I mentioned, they also are taking courses at BCCC toward an associate's degree in that field. They have four to six years to earn that degree. So P-Tech is an example of how CTE can move forward in partnership with our local community colleges.

One of the things that we also are considering is dual credit opportunities for our students in CTE pathways so that they can also earn college credit. For example, with Project Lead the Way (PLTW) students finish the PLTW coursework and colleges will give them articulated credits based on their performance in that in those courses. There are courses students could take for which they automatically receive credit. One of the tensions is that if I'm already paying for a teacher on the high school side to teach the coursework, I'm at ease, a little bit challenging to think about additionally paying for somebody at the college to teach your course as well. Dr. Pfeifer's team is trying to navigate toward the best way to get students those credits might be whether it's dual credit or articulated credit. P-Tech is one of the office's key career readiness approaches that we often talk about separately from our CTE planning, but certainly incorporate CTE pathways.

I'm curious about pre-engineering. If that's going down to from nine to three schools, how many of the current number of seats are still going to be possible with that much of a consolidation?

We're still in the proposal stage so no final decisions have been made but we're looking at a teaching load of three sections with 25 students each. It could be more given different schools' models. Each teacher will teach roughly 75 students. Part of what we would look at is putting two teachers in each school, whereas many of our programs right now just have one teacher teaching that program. We'd be able to have roughly 150 students in those schools with that pathway for about 450 students across three programs. Though, again, the number of programs we're still trying to determine.

I'm also curious on how this rolls out. So if I'm a sophomore at one of the six schools that is not going to continue to have pre engineering, do I get grandfathered in? Can I stay at my school? What's the scenario for a junior or a rising senior? How does this impact students? And will they have to transfer schools to complete their path?

One of the bullets I didn't highlight earlier is that, as much as possible, we are trying to allow students who are in current pathways to continue in those pathways through completion. This is why we're having these discussions now so that we can have final programming put together by the 2023-2024 school year. None of this is happening overnight. There are some small changes that we made this year due to programs that were obsolete or MSDE wasn't supporting anymore. We'll make some additional changes in the coming years. There are some programs where, for instance, we have three teachers at a school and only 40 students. So there are some shifts that we'll be able to make, even now. In a scenario, our priority is that students can complete their coursework in that pathway.

The Baltimore City STEM plan talks about adding capabilities for a cyber and a CTE pathway. Is that outside of CTE or not a priority at this point.

We've already started that that is part of our Cisco pathway. Part of the Talent Ready grant we got from JP Morgan is enabling us to make cybersecurity one of the paths that students take within Cisco and it will be embedded there.

Lots of progress and congrats. Strategy seems thoughtful in the way things will change with an overall goal in mind. Is it clear yet how philanthropy may be able to be helpful in implementation of the plan?

Things are changing rapidly. I got the call on Wednesday night about the budget freeze. We're still trying to think through what it's going to look like. As much as possible, we're trying to reallocate resources to be able to cover our needs but there are going to be areas where it will be harder for us to find things that are a little bit more original. Things such as embedding some of the shorter-term certifications. In an environment where budgets are tighter, it'll be harder to fund some of those. Creative work-based learning opportunities is one of the areas that philanthropy could be helpful. The other thing that comes

to mind is getting our students laptops that are heavy duty enough to be able to use some of the software required for some of our engineering and computer aided design related pathways.

Are the scenarios considering the availability of work-based learning slots for minors such as clinical placements or internships?

Part of what we're doing now is to wrap our heads around what is out there. Since I've been here, this is the first time we've had a team that's seeking to document all our work-based learning opportunities. This even includes opportunities such as job shadows. We've just purchased a workforce database and, to be honest, I don't think we have a codified way of knowing what's out there quite yet. We know that clinical hospital internships certainly are not open right now along with others in health careers, but we're trying to build out what's possible.

I really like the focus on pathways leading to jobs paying a livable wage. Have opportunities for youth apprenticeship been explored?

Yes, we are looking into the purchase of programs out there across the city and region. Having this work-based learning team that is focusing on this full-time is going to be extremely helpful to answer your question. They will be collecting all the information out there about what's available to us and then pursuing them.

Is there any thought about consolidating outreach to employers to make these work-based learning placements possible?

I'd like to hear more. We're working with MOED and the work-based learning team will regularly meet with them. If there are other consolidations that you think would be helpful, or other folks we should be talking to, I'd love to know.

I just brought that up because in the past I've heard from employers getting approached from teachers at various schools and just being overwhelmed. I know that may not be the first thing to tackle. The streamlining of employer outreach is an issue to look at.

Well, I'm glad you brought that up. So, the intent of hiring the team was to be able to do that and so then to provide teachers with a database of opportunities they can then share with their students. There will always be teacher relationships with industry partners that I think will be a little bit trickier to navigate. But our goal is to be able to centralize that, so employers aren't hearing from 16 schools.

Dr. Pfeiffer and her staff deserves a lot of credit for the depth of work that they are doing here. And they are taking on the challenge of looking at the data, realizing that things aren't where they should be. This is really a difficult task. And I applaud her and her associates for taking on the challenge.

Thank you, I appreciate that. And again, just want to give thanks to our team at Project Evident that we were able to work with to support

Participants

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