

Career Pathway Systems: Lessons from Miami

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Introduction

In order to help federal policymakers and national education leaders better understand how to develop a career pathways system, AYPF staff and a group of national leaders visited Miami-Dade County Public Schools, renowned for its commitment to providing students with multiple pathways to success. Their career pathway efforts center around programs of study which build students' competencies in core academic and career areas and provide the opportunity to earn postsecondary and workforce credentials. This work relies on strong partnerships between Miami-Dade County Public Schools, higher education institutions, business leaders, and community organizations.

District Overview

Miami-Dade County Public Schools (M-DCPS) is the fifth largest school district in the nation with over 350,000 students. Of those students, two-thirds are Hispanic, nearly a quarter are African-American, and fewer than 10% identify as white or another race. Nearly 75% of students in M-DCPS are eligible for free or reduced priced lunch. Of the total student population, 106,000 attend schools with career and technical education (CTE) programs, including 56 [National Academy Foundation](#) (NAF) Academies and 246 [Career and Professional Education](#) (CAPE) Academies.¹

Career pathways in Miami fall into seven major industry categories and are based on employer demands as indicated by the [One Community, One Goal](#) initiative of the Beacon Council, the economic development organization in Miami-Dade County. Students in career academies do particularly well: 98% of students in NAF academies graduate, and 93% indicate that they plan to attend college. M-DCPS programs also help students earn certifications in over 100 occupational areas, many of which are linked with college credit, saving students and families thousands of dollars each year.

School choice has become increasingly prevalent in Miami—students can choose from a vast array of CTE programs across the district, including career academies and magnet schools, all of which guide students along various career pathways. For many programs with high demand, students are chosen based on a lottery, and some students travel outside of their neighborhood to access the program that best aligns with their interests. The current superintendent, Alberto Carvalho, has prioritized CTE through this robust choice system as a means of engaging more students and preparing them for college and careers.

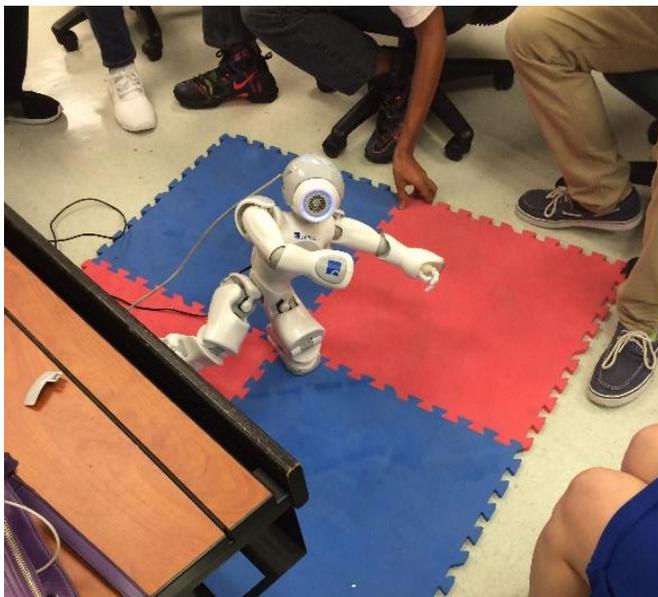
The district partners closely on career pathways with two local public universities: Miami Dade College (MDC) and Florida International University (FIU). These colleges provide the vast majority of dual enrollment offerings in the district through articulation agreements with M-DCPS, and they each promote career pathways, namely through the Career Pathways Consortium at MDC and the FIU Education Effect. In addition, the Beacon Council, the Greater Miami Chamber of Commerce and South

¹ National Academy Foundation (NAF) Academies are small, career-focused learning communities within larger schools, operated across the nation in partnership with the non-profit NAF. CAPE academies, created in 2007 by Florida's Career and Professional Education Act (CAPE), are career academies that meet the unique requirements of the state of Florida.

Florida's Workforce Development Board, Career Source South Florida, provide additional career pathways support by facilitating student-employer connections. The district has also benefitted from a partnership with JP Morgan Chase, which launched a 5-year, \$250-million-dollar initiative to support career pathways in five cities, including Miami. Collectively, these efforts have paved the way for strong and vibrant career pathways, which were on display at three M-DCPS schools we visited.

School Overviews

A wide variety of schools utilize career pathways. The schools AYPF visited in Miami include Miami Lakes Educational Center and Technical College, a campus that serves both secondary and postsecondary students in mixed classes, Hialeah Gardens High School, a traditional high school serving students from grades 9-12, and George T. Baker Aviation Technical College that serves secondary and postsecondary students in separate classes. These schools employ teachers with traditional academic teaching credentials, as well as teachers coming from the industry about which they will teach. All three schools serve a high percentage of students of color and students eligible for free or reduced priced lunch. The diverse student population in the district is given a wide range of school and program options to choose from, which is critical to the success of Miami's system. As a result of having a wide variety of school and program options, students are likely to enter a pathway that they find interesting and see as meaningful to their future.



Engineering students at Miami Lakes Educational Center present a robot they created.

At *Miami Lakes Educational Center and Technical College (MLEC)*, all students participate in one of five career academies: communication and entertainment, entrepreneurship, health science, information technology, and trade and industry. Within each of the academies, there are several different strands, each providing students with hands-on learning opportunities and projects directly related to their fields of interest. In the information technology academy, for example, students learn how to program robots to walk and talk, while students in the culinary track of the entrepreneurship academy prepare meals for students and staff on a regular basis. Additionally, MLEC's adult vocational programs are broken up into six career clusters and aim to help adults boost their employment prospects and earning potential by gaining relevant, in-demand vocational credentials.

Hialeah Gardens High School functions as a traditional high school within M-DCPS and offers career academies in law, technology, biomedical, education, engineering, hospitality and tourism, arts and entertainment, and finance. Students also take rigorous [Cambridge Academy](#) and Advanced Placement courses, underscoring the emphasis on preparation for both college and career. Among the highlights of the school were the agricultural program, which is part of the Academy of Biomedical Sciences, where students learn aquaculture and raise small animals, and the onsite preschool where students in the education academy gain hands-on experience working with children.



AYPF Staff and national leaders visit the agriscience program at Hialeah Gardens HS.



Student at Baker Aviation Technical College explains the design of propellers.

George T. Baker Aviation Technical College (Baker) is a vocational program, serving both secondary and adult students, for people interested in pursuing careers in aerospace technology, electronics, avionics, and aircraft maintenance. All high school students at Baker attend zoned or “home” schools, where they take core academic courses, and then come to Baker for technical training courses. The school is in close proximity to Miami International Airport and has close ties to industry leaders who often train and hire Baker graduates. The school also owns its own 737 aircraft and several other aircraft on site to provide students with authentic hands-on learning experiences.

Emerging Themes

AYPF’s visit shed light on a few key features of career pathways in Miami that the group felt were particularly crucial to the success of career pathway systems.

Early career exploration

M-DCPS provides students with early career guidance on a wide range of career pathway options, each with a cohesive curriculum and a clear connection to a career field. In middle school, students receive

career exploration opportunities and counseling courses to ensure they are aware of a variety of career options and the pathways to get to those careers. Starting in the 2016-2017 school year, with the help of funds from the Carl D. Perkins Career and Technical Education Act (Perkins) and strong partnerships between the district's middle and high schools, M-DCPS will institute virtual job shadowing at all middle schools to provide even more opportunities for students to explore their career interests before they reach high school. Once students have decided on a pathway and arrive on a high school campus, they are better prepared to be immersed in a program of study intentionally designed to build core academic competencies as well as competencies in the specific career track of their choice.²

Strong partnerships with postsecondary and workforce institutions

Partnerships are essential in ensuring that career pathway curricula, including opportunities to earn credentials, are relevant and meaningful for both students and community partners. Through partnerships with several local colleges and universities, M-DCPS schools allow students to earn college credit and industry certifications by taking dual enrollment courses or by participating in on-the-job training. In addition to partners in postsecondary education, these partnerships and the opportunities that come with them would not be possible without collaboration with employers and other workforce partners. For example, M-DCPS does not institute a new career pathway program unless it is aligned with local labor market demand, as indicated by The Beacon Council's One Community One Goal initiative. Many M-DCPS schools also work with advisory boards made up of business and community leaders to further inform programmatic decisions. Finally, M-DCPS has created a [matching system](#) in which students can upload their resumes, once approved by classroom teachers, and be matched with work-based learning activities and compensated internships. These mutually beneficial partnerships ensure that the K-12 education system is sensitive to the needs and demands of the local labor market, ultimately better preparing the students who will be entering it.

College and career emphasized in school curriculum and culture

Above all, these schools work to ensure that students are provided with the competencies and credentials needed to succeed in whatever future path is best for them: postsecondary education, employment, or both. These career pathway programs provide not only relevant academic coursework such as project-based learning and integrated curriculum, but also opportunities to work directly with employers. These hands-on work opportunities can be facilitated in the classroom with industry-certified professionals or in internship environments which are generally paid and culminate with some sort of industry credential. This openness to both college and career is central to the culture at each of these schools, with some teachers coming from traditional academic backgrounds and others coming directly from industry. The underlying philosophy in M-DCPS is that there should be no separation between academics and career and technical education. Both, together, help students develop relevant, 21st century skills that are applicable in both academic and employment settings.

Policy Considerations

As more states and municipalities contemplate the value of career pathways in their own communities, there are several issues to consider in order to develop a truly supportive policy framework.

² Baker Aviation Technical College does not provide core academic classes, but partners with zoned high schools around the district, where students participate in traditional academic coursework.

Facilitate partnerships

As demonstrated in the examples above, postsecondary, employer, and community partnerships are essential in developing effective career pathway systems that work for youth and the community. In Miami, these partnerships are sometimes initiated by educators and district administrators, and in others, employers have sought out these partnerships to ensure that more students graduate with specific skills or credentials that those employers require. Policies at various levels can support the creation and maintenance of strong partnerships. The Perkins Act strongly encourages and in some cases [requires](#) the adoption of partnerships with postsecondary institutions and employers, as does the Workforce Innovation and Opportunity Act ([WIOA](#)). These federal policies alone, however, do not apply to all career pathway programs, nor do they guarantee that partnerships will flourish in a meaningful way for all partners as they have in Miami. States can play an important role in enabling and strengthening these partnerships by providing guidance, technical assistance, training, and by sharing best practices with and between localities. Leadership at the local and district level is also crucial in building strong and sustainable partnerships. For example, the collaboration between middle and high schools in M-DCPS illustrates the commitment those schools and the district have made to create a jointly beneficial partnership in which all parties are invested in helping students make informed education and career decisions. Districts can also incorporate employer partners into advisory boards and committees to help inform decision-making, as M-DCPS has done. Additionally, school districts or intermediaries can promote or facilitate the sharing of data so that schools are aware of what postsecondary institutions and employers need and can identify opportunities for growth. Some communities have created and sustained strong partnerships without intermediaries, but others may benefit from having an intermediary to help broker and manage relationships within the community. With or without intermediaries, local and district policies can encourage and incentivize elements of productive partnerships such as those outlined above, and can clearly articulate a shared community goal to create the foundation for these partnerships to succeed.

Allow for flexibility to better serve students

Leaders in Miami-Dade County indicated that increasing flexibility in federal policy would allow them to be more successful in serving students. For example, Miami leaders desire the flexibility to use Perkins dollars to support students in 6th grade. Currently, Perkins dollars can only be used for students in 7th grade and above. If Perkins dollars could be used for 6th graders, these students could benefit from earlier career exploration that would set them up for long-term success in career pathways. Another suggestion from the Miami district staff was that federal policy should place a broad emphasis on promoting equity, while allowing for local flexibility, rather than requiring all CTE programs to hit specific numeric targets for participation. According to the district staff, federal policy should be flexible enough to allow school leaders to preserve equity while also tailoring programs to students' greatest needs and career interests.

Use Perkins funds to promote innovation

According to Miami-Dade’s leaders, career pathways would be even stronger if federal Perkins funds could be used to support innovation. At present, Perkins funds have been used to support a variety of career pathway services including professional development opportunities for teachers and staff, internship experiences for students, the development of career and technical student organizations, work-based learning opportunities, and curriculum development and alignment. Funds are also used for necessary equipment, as Baker used Perkins dollars to purchase a \$40,000 ground power source to power the airlines, which is essential to the school’s whole aviation program. While these uses have been integral to Miami’s success, it seems worth exploring how Perkins funds can be used to promote greater innovation in career pathways and worth considering whether to expand the definition of what qualifies for Perkins funding to allow for more innovation.

Conclusion

Miami-Dade County is an exemplar of an effective career pathway system. Career pathway and CTE programs in Miami equip students with the knowledge and skills to succeed in postsecondary education and for employment in an increasingly competitive and technical workforce. Thanks in large part to committed leadership, strong partnerships, and dedication to continuous improvement, Miami-Dade County has shown that career pathway systems can lead to long term success for students, schools, employers, and the community.

Additional resources:

1. [Miami-Dade County Public Schools](#)
2. [Miami Lakes Educational Center and Technical College](#)
3. [Hialeah Gardens High School](#)
4. [George T. Baker Aviation Technical College](#)
5. [One Community One Goal Initiative](#)
6. [Information on Carl D. Perkins Act](#)