

## **Case Stories**

### **Best Practices from Model Academy Principals**

Ho'omau: Transforming a Community Through Perseverance and Persistence

Waipahu High School, Waipahu, Hawaii

"Gang violence, student unrest, high truancy, low attendance, and only about 10% of graduates pursued postsecondary education," Jean Miyahira, former Marketing Education and DECA Coordinator in 1974, at Waipahu High School teacher remembered the campus when she helped start the first academy there in 1990? "I was the Director of the NAF Academy of Travel and Tourism and the Academy of Finance, and Coordinator of the Business and Computer Technology Learning Center. It was difficult to attract business partners. They were hesitant about getting involved with school programs because they visualized a campus of unrest."

By 2008 not much had changed. When Special Agent Arnold Laanui, FBI, Honolulu, was researching schools in Hawaii that might be helped by the FBI's Adopt-a-School program, he found alarming statistics for Waipahu. Almost half the juvenile criminals in the state of Hawaii came from the neighborhood surrounding Waipahu High School. "That one little plot of land, not far from the high-rise hotels of Waikiki represented the most crime-ridden neighborhood in the state," Laanui noted. Data also showed that only about half the students who entered Waipahu as freshmen graduated four years later. Laanui wondered, "did the students who dropped out resort to criminal activity because there were few other options?"

Considering the statistics, it would have been easy to give up on Waipahu High School. So many attempts at change - new programs, reform agendas, and leadership changes could easily have discouraged the most dedicated staff. Principal Keith Hayashi reflected, "Waipahu was a high school and a community in crisis. There was a tremendous amount of work done at Waipahu High School on implementing Smaller Learning Communities. However, when talking with teachers and staff, it was obvious that each person visualized something very different. The lack of a coherent design impacted our ability to move forward in informing and transforming our school identity."

In order to create school-wide unified vision, Principal Hayashi organized group sessions with teachers and school leaders. The focus of those meetings was, "Who are our clients and how are we meeting their needs?" After the group sessions, a preliminary plan was created that outlined a vision for the school community that included transforming the school into an all-academy high school. Principal Hayashi explained, "We shared the draft with our whole faculty, and working in teams, we continued to make revisions. It was important that everyone understood the rationale of each groups' thinking, but the critical piece was, that as we shared, we grew a collective understanding of who we were as a school community." This work helped the faculty come together as a team, which is one of the foundational concepts of the academy model. This supports NSOP 4, which reads in part, "... a career academy's success rests on good teaching and good teamwork among a cross disciplinary group of staff, they must be well-qualified and willingly involved in this role. They understand and support the philosophy and purpose of the academy..."

It also became clear from those meetings that if Waipahu wanted to make their vision a reality, they needed to connect with industry and community partners. One of those early partners was Special Agent Laanui and the FBI Honolulu Division's Adopt-a-School program. In 2009, Waipahu was chosen to become the first school to participate in the program. It was the beginning of a partnership that continues to get stronger. Adopt-a-School invites ninth-graders to participate in a Leader Lab where they receive instruction on ethics, relationships, strategies for success and leadership. They also work in teams to design projects that benefit the school and the neighborhood. If students express an interest in criminal justice, they can enroll in the Academy of Law and Justice Administration Academy, which Laanui, working with the faculty helped to create. Cultivating this kind of partnership is a critical element to a successful academy and starts with solid commitment from the whole school. It is often not easy. Both the industry partner and the school need to compromise and learn from each other as they cultivate the relationship. But the results speak for themselves.

Today, the incidence of violence and drug use on campus is down by more than 50 percent. Truancy and suspension rates have dropped by more than 50 percent as well. Laanui sees a reciprocal effect in the neighborhood with a 50 percent reduction in juvenile delinquency rates and an anticipated reduction in future adult criminality. Waipahu has seen a surge in test scores, and attendance rates, and has been recognized for its dual credit programs statewide. Instead of a violent and troubled campus, the school is now celebrated for its academic achievements and for its Model academies. Miyahira beamed, "Two of the academies, Academy of Natural Resources and Academy of Health and Sciences achieved the National Career Academy Coalition's Model status three years ago, the first for the State of Hawaii, and serves as a learning center for other schools interested in replicating college and career readiness programs."

In the book, "Managing with Aloha" author, Rosa Say presents the "19 Values of Aloha." She says that values "help us define our 'why' and also provide us a 'how to'." Ho'omau, meaning persistence/perseverance is one of those values. Ho'omau, she explains also means to perpetuate, and to continue in a way that causes good to be long-lasting. "Those who ho'omau do not give up easily, and they consider mistakes and failure to be temporary conditions from which to learn and move on from." Waipahu High School's leadership, teachers and staff, were always clear-- students were their "why." The students were the reason they never gave up. Ho'omau endowed them with the capacity to face obstacles and continue.

Structure Provides Clarity and Promotes Growth Germantown High School, Madison, MS Maplewood High School, Nashville, TN Northeast High School, St. Petersburg, FL

Organization and Structure is the focus of several National Standards of Practice for Career Academies (NSOP). NSOP 2, Academy Design, outlines the components for effective academy organizational structure including Cross-grade articulation, Cohort scheduling, Physical space, Small size, and Supportive atmosphere. NSOP 4's emphasis is on the configuration and responsibilities of the teaching team. The importance of organizational structure in the implementation of the academy model cannot be overemphasized. Teams of teachers working across several academic and technical subjects and students grouped in cohorts for these classes provide a framework that makes it easier to facilitate the experiential components like shadowing, community service, mentoring, internships, and apprenticeships.

Implicit in the structure of the model is the clear understanding of roles within the structure, thus eliminating ambiguity for leadership as well as staff. Principal, Wesley Quick and Academy Principal, Brent Brownlee of Germantown High School, located in Madison, Mississippi, discussed how role definition and structural clarity created the environment for excellence in teaching and learning. "One challenge that we needed to address was our academy teaching team structure. When the Career Academy concept was first brought to our school the academy teaching and leadership roles were unclear. There was not a defined Academy Coordinator, Principal, or Teacher Leader. The second issue was that CTE courses were not taught on campus. Roles were vague and communication was inadequate," Principal Quick recalled.

Under Quick's leadership, CTE courses were brought to Germantown's campus. Advisory Boards were set up and a communication strategy was developed so that the Advisory Board members understood the change. "We wanted to make sure the Business partners understood that this move was the best fit for our school and community," said Quick. At the same time, the school was able to hire an Academy Coordinator and assign a dedicated principal and counselor to the academy. "In fact, one of our inaugural Academy teachers became the Academy principal, solidifying the foundation of our Academy," Quick remarked. Further, Brownlee and Quick observed that role clarification and defined structure have improved information flow not only among the team but with the community stakeholders as well. Refining the structure and role definition paved the way for Germantown's Healthcare Academy to achieve "Model" status in 2017.

Structure is also key for creating the "family-like" atmosphere that students often cite as one of the most important features of an academy. Maplewood High School in Nashville, Tennessee, is home to three National Model Academies: The Academy of Entrepreneurship and Innovation, the Academy of Energy and Power, and the Academy of Sports Medicine and Wellness. Principal Keely S. Jones Mason says the structure of the academy model—the cohort schedule and teaching team—allows teachers, school staff, and business partners to build positive relationships with students. It also helps students build relationships with other students, often encouraging their peers to stay on task, or apply to college. "The structure creates a family atmosphere," said Principal Keely S. Jones-Mason. "Some of our business partners contribute to not only the academic and career preparation of our students but, in some severe circumstances, to providing resources to feed and clothe students and their families."

At least one school has taken advantage of the academy structure to help build leadership capacity among school staff. Mike Hernandez, Principal from Northeast High School in St. Petersburg, Florida explains, "When our academies started, there was one Assistant Principal and one Counselor responsible for all four academies—coordination of academy applications, student placement and cohort scheduling, academy events and participation in all the advisory board meetings—the task was overwhelming." Northeast High School decided to expand leadership opportunities by enhancing the academy leadership structure. Principal Hernandez places one Assistant Principal, one Counselor, and one Lead Academy Teacher over each of the four academies. "This core team along with the Advisory Board serve as the core decision making body for that academy," Hernandez explained. The new leadership structure at Northeast High School allows each academy to flourish including the Academy of Finance that achieved Model Status in 2016. Each leadership team focuses on students and growing students towards success. "Teacher Leaders are the critical piece. They must love students, love their craft and be willing to allow students to have 'Choice and Voice' in their learning."

## Authentic Experiential Learning Transforms Students at Clearwater High School Clearwater High School, Clearwater, FL

Clearwater High School in Pinellas County, Florida is the most diverse High School in the district. It has a 52% Minority population and 58% of students overall are listed as Economically Disadvantaged. The Career Academy for International Culture and Commerce recently achieved "Model" Status from the National Career Academy Coalition and school has earned a "B" designation from the State of Florida. It boasts an almost 95% graduation rate with 82% of the graduating class receiving at least one college credit. Some principals would be content with those achievements. But, Principal Keith Mastorides observed that despite the good work that was happening in the school, some groups of students were being left out. Hispanic, African American, and low socio-economic students were not participating in leadership opportunities on campus as compared to other groups. He also discovered that project-based learning (PBL) was not used in every classroom. because some teachers believed that PBL was only for high achievers or fluent English speakers. Mastorides knew that he needed to do something to motivate students to engage in leadership activities and at the same time encourage teachers to have a growth mind set as it applied to student achievement.

Principal Mastorides called a meeting of his leadership team to brainstorm ideas for how they could change that paradigm. "We created a project-based personalized learning opportunity for students, that we felt had untapped leadership qualities. We call it the Civil Rights Tour. Students research and create an experience that encompassed real-world occurrences that connects them to the Civil Rights movement in the United States. This allows students to have a deeper understanding of the Civil Rights movement in the United States," Mastorides explained. The culmination of this project is an in-depth tour of sites with historical significance for the Civil Rights Movement. The students research and set up interviews with individuals who participated or witnessed these important events. No professional tour guides are hired. Students are responsible for all aspects of the tour including budget, accommodations, schedule, and transportation. After participating in one of these tours, students are encouraged to become "change agents" on our campus by leading cultural competence training and developing collaborative awareness and structures for all of our students. They also participate in peer-to-peer mentoring as Big Brothers and Big Sisters.

Principal Mastorides recalled the program's impact on one student, "There was a young man who had difficulty adjusting to high school. He came into our school with poor presentation and speaking skills. Some staff did not see him as a leader. He also had some disciplinary and grade issues. When he was invited to join the Civil Rights Tour, several teachers came forward and thought that he was not a 'good fit.' But, I believed it was the perfect opportunity for him." It wasn't long before everyone saw a transformation in the young man, Mastorides recalled, "Participation in the Civil Rights Tour changed him. Suddenly he started speaking up and asking for help. He wanted to improve his presentation skills so that he could communicate the importance of that time and those leaders to others. He participated on several student panels and presented at Project Graduation through the United Way Foundation, and he was the keynote speaker at the school's student-led Marjory Stoneman Douglas High School's Commemoration event. At the end of his senior year, he was chosen as the Area 2 Youth Outstanding Volunteer of the year, and he recognized for having the strongest Power Talk, "Growing Greatness" at the National Career Academy Coalition Conference in Nashville, Tennessee."

The Civil Rights Tour exemplifies NSOP 7, "Teaching and Learning" which reads in part "...Learning illustrates applications of academic subjects outside the classroom, incorporates current technology and 21st Century Skills, and includes authentic project-based learning."

In the second year of the Civil Rights Tour, Mastorides notes changes in both students and teachers, "We have seen a significant increase in the number of students in our sub populations occupying leadership roles on our campus. We have also seen a significant number of teachers across our campus utilizing project-based, personalized learning opportunities for all of our students. There is a mindset now that all children can achieve if we give them the same opportunities. But the overarching goal of this program is for our community to preserve, promote and perpetuate the importance of the legacy of the Civil Rights Movement in the United States." The Civil Rights Tour also seems and excellent example of how project-based learning and the career academy model not only makes learning relevant for students but can be a vehicle for community learning.

## Strategy Walks: Creative On-Site Teacher Learning Opportunities Northeast High School, St. Petersburg, FL

While most school leaders recognize the pivotal role that professional development plays in ensuring that educators continue to strengthen their practice, many find financial restrictions and time constraints as major barriers to providing consistent and meaningful professional learning. Principals need to be creative in their approach and provide learning activities that are both cost effective but at the same time, enable educators to develop the knowledge and skills they need to address students' learning challenges.

Michael Hernandez, principal of Northeast High School in St. Petersburg, Florida understands the dilemma and came up with that helps to address it. "Good teachers want to be great teachers," he said, "and we wanted to help them accomplish that. We

wanted Northeast High School to be a place where both adults and students learn." Northeast High School is a four-year, comprehensive high school located in St. Petersburg, Florida. It is one of the largest high schools in the Pinellas County School System with a current enrollment of over 1,700 students and a staff of eighty-one. Northeast has four certified academies and one National Model Academy, the Academy of Finance.

Hernandez and his staff came up with the idea of "Strategy Walks" that allow instructors to visit colleagues' classrooms to observe an instructional strategy. A menu of options is created quarterly that lists the Instructional Strategy, the room number, and the name of their colleague who will be demonstrating and highlighting a particular instructional practice. A reflection slip is provided for teachers to reflect on and give feedback to their colleagues' presentation technique. At the end of the day, faculty meets as a group to debrief on the instructional rounds. The goal is for teachers to try to incorporate the strategies they observed into their practice. A quick turnaround for implementation is recommended so that the strategy and training is fresh in their minds. This approach benefits both the observer and the presenter, strengthening both the classroom technique while developing leadership capacity and confidence of the faculty member providing the instruction.

"Strategy Walks" can also have different themes or variations based on the schools' goals and needs. For example, Northeast has used themed Strategy Walks around subjects like: AVID WICOR; Academy Thematic Units in Core Classes; Collaborative Strategies; or Literacy within the content area; and Academy Integration Projects. Themes can also be based around the ten National Standards of Practice, with each classroom focusing on a different Standard. The overall goal is to allow teachers to lead their professional development and learn from experts within the school and at the same time develop the capacity and expertise of the entire staff.

"One of our biggest successes was the implementation of these school-wide Strategy Walks," said Hernandez, "when teachers are challenged to present their teaching practices with their colleagues, it helps them identify what really works in their classrooms." While schools are primarily for educating children, one must assume that for teachers to be effective and to grow their craft, they need an environment that provides motivating conditions and opportunities for professional learning. Northeast High School in St. Petersburg, Florida provides that setting.

Summerlin Academy: Digging Deeper for Student Success Summerlin Academy High School, Bartow, FL

Summerlin Academy High School, is located in the city of Bartow, Polk County, Florida. Summerlin is unique in that it is a standalone school but It is also one of the few academies that you can belong to and at the same time participate in other career-themed academies. Summerlin Academy is an academy of leadership skills that is taught through JROTC classes. All students participate in JROTC classes, but if students have additional interests in other areas Summerlin encourages them to take advantage of and participate in the many other academies that the district offers. It is not unusual for a Summerlin Academy student to graduate with a certification in a CTE area. Students must complete a capstone project during their senior year but they can either do that through a course provided at Summerlin Academy or in an academy of their choosing.

Principal Steve Cochran, who also holds the title, Commandant of the Summerlin Academy explained, "Some people assume that because we use JROTC as our method of delivering leadership skills that we are an academy that only encourages participation in the military. While a significant number of our students will enlist in the military most of our students go on to college. We believe our program is successful when are students take the leaderships skills that we have taught them and they use them in college, career, or life."

Summerlin Academy can trace its roots back to two schools. Summerlin Institute was established as a public high school in 1887. Union Academy, founded in 1897, was named after the Freedmans Bureau School that was organized immediately after the Civil War and was one of the first schools in Florida established for the education of African Americans. As a diverse community of learners, Summerlin Academy's name embodies the heritage of both schools. Summerlin Academy was named a Model Academy school by the National Career Academy Coalition (NCAC). Teachers work together to continue to make innovations so that students succeed. Steve remembers an example of how the team worked together to help students succeed. "A few years ago, we studied the reasons students left Summerlin Academy. It turned out, that the number one reason students left or were removed from Summerlin Academy was for failure to maintain a 2.0 GPA. Digging deeper into this information the number one cause of student failure was incomplete or late assignments. If we were going to remain a viable and productive Academy we needed to address the issue of student failure to complete homework especially at the ninth-grade level."

Teachers had the idea of a study hall called "School of Cadet" that would help students complete their homework. Steve recalled, "At first, we thought this would take place after school. But we soon realized that since a majority of our population are drawn from all over the county and it would be difficult for many of the students to stay after school." The Solution? Summerlin's School of Cadet went through the student lunchtime—a working lunch! During that study hall students would complete homework or missing assignments under the supervision of a teacher and with the assistance of student tutors. The administration developed a Google document that was used to refer students and to note the assignments that needed to be complete. At the end of each day a spreadsheet was printed with students' names who needed to report to the school of cadet the next day. The teacher in charge of the tutoring session would receive a folder with the required students' assignments in it at the end of the day and take it to the tutoring session the next day. A room was set aside adjacent to the lunchroom. Complete and incomplete assignments were ranked using the Google document.

The lunchtime, School of Cadet had an impact. Cochran noted that at the end of the first year, "Twenty percent more students in the ninth-grade maintained a GPA above 2.0." Working together for the sake of all students, Summerlin teaching team demonstrates NSOP 1, c. Student achievement, which reads in part, "So as not to become either a bastion of top performers or a dumping ground for unsuccessful students, an academy provides support to all of its students to maintain and increase their achievement in high school. This support comes through close relationships with teachers and fellow students, ..., including a strong focus on personalization..."

Principal Cochran complimented the teaching staff saying, "At Summerlin we all work together to help every child succeed. If we see even one student failing, we work together to figure out what's going on and how we can help."

### Changing Perceptions and Embracing Reality Overton High School, Nashville, TN

John Overton High School is located in the Oak Hill section of Nashville. Just south of downtown Nashville, and close to the Governor's Mansion, it has always been considered one of Nashville's wealthiest neighborhoods. Since the school's opening in 1958, Overton's students looked like the population of the traditional Southern city that she served. In 1999, Overton's students were 70 percent white and there were no non-native English speakers. Only 13 percent qualified for free or reduced-price lunch. But as Nashville grew and geographic boundaries changed, many families in the Oak Hill neighborhood chose to attend different schools when Overton was forced to integrate. In the early 2000's when Nashville was designated a resettlement city for thousands of refugees, change came fast to Overton and by 2006 the school was in crisis and grappled with the increasing numbers and new population. Many residents of Oak Hill said, "Overton used to be a great school." And, indeed, the school did struggle to find its footing amidst such change.

In 2006, when the Academies of Nashville brought career-focused, smaller learning communities to schools there was a new kind of resistance. Initially, there was a perception of "dumbing down" to a vocational model but, Overton leadership and staff

worked tirelessly to explode this myth. Resisting the trend to isolate advanced academics in just one academy, every student, regardless of academy choice, has the opportunity to participate in the Cambridge college preparatory pathway, Vanderbilt Interdisciplinary Science and Research multi-year programming, Dual Enrollment, or Advanced Placement courses. Additionally, all students participate in the award-winning Fine Arts electives in music and theater regardless of their academy choice. For Overton, all means all, and with a rich offering of comprehensive curricula, students concurrently complete a career-focused elective pathway in one of four National Career Academy Coalition "Model" designated academies.

But Overton's journey to "Model" status and incorporating the full academy philosophy of student choice took some changes in the collective mindset. Dr. Jill Pittman, Principal of Overton recalls, "Just as the neighborhood made assumptions, we, at Overton learned that even well-meaning educators can fall into the trap of wrong assumptions and cultural misunderstanding. Early in the Academy design process at Overton, English Learners were assigned to the Urban Agriculture program with the notion that they would be interested in growing herbs and vegetables native to the cuisine of their respective heritages. The program was forcefed for several years, but new school leaders were quick to recognize the mistake." With student choice in place, the Urban Agriculture pathway offered its final courses in 2018 based on a lack of interest. "It was an 'a-ha' moment," Pittman recalled. "We realized that we were also making assumptions for our Band and Orchestra students. They were scheduled for years into the Engineering Academy, so that it became the "smart kid" academy. We assumed that we knew what was best for students." Over time, Overton's practices shifted to include authentic engagement of Freshman in CTSO activities, purposeful marketing, and school-wide branding. This year, when the 640 freshmen made their selections from among the four academies, ninety-eight percent got their first choice, with no qualifiers for anyone.

With the academy model firmly in place, Overton is thriving. It is one of Tennessee's most ethnically diverse school. The students come from 52 countries and speak 42 languages. Almost 70 percent of the students live in homes where English is either not spoken or is the family's second language. As many as 40% of the students are classified as refugees or immigrants and 76 percent qualify for free or reduced-price lunch. In 2017, the pass rate for Overton Cambridge AS and A level assessments exceeded the pass rate for AP assessments at both of Nashville's nationally ranked academic magnet schools, earning Overton, one of the best overall pass rates for U.S. Cambridge schools and the highest in Tennessee. Community organizations that ten years ago awarded prestigious scholarships to graduates of the many surrounding private schools now award more of these to Overton students, whose post-secondary paths are heavily influenced by their academy experiences.

Principal Pittman is proud of the work that Overton has accomplished. "The positive impact of these changes has meant growth not just for kids, but for adults, too. Overton alumni, young and old, are returning to the school in faculty, staff, and volunteer roles. The community around the school now says, 'Overton is a great school'."

Helping Students Make Informed Choices Cane Ridge High School, Nashville, TN John A. Dubiski High School, Grand Prairie, TX

"What is an Academy?" "What is a pathway?" "What if I don't like any of these choices?" These are a few questions that second semester ninth graders ask even after participating in the Freshman Seminar, a year-long web-based curriculum that exposes the students to all the career academies that are offered in the district, and highlights the career academies that are offered at Cane Ridge High School. Nashville also hosts a city-wide Career Exploration Fair that is organized through the school district and the Nashville Chamber of Commerce.

The Fair builds on career exploration research that they did in school including participating in an essay contest and learning about professionalism in the workplace. Students visit with volunteers from industry and participate in hands-on activities. And still, ninth graders see themselves as just part of the Freshman Academy. They do not fully understand that they will select a career academy that will be part of their high school experience for the next three years. Parents may also be concerned that their child is asked to "select a major" in 10<sup>th</sup> grade.

NSOP 1, Section b. Student Aspirations reads in part "... Continued personal awareness and exploration, along with curriculum and experiential components and extracurricular choices, also help to provide guidance. The biggest limiting factor in many youths' future plans is not ability, but how they perceive their future."

Cane Ridge High School in Nashville, Tennessee makes sure that students are properly equipped to make an informed decision about their career academy selection. Principal Michael Sanchez believes that student-*informed* choice is a priority. Ms. Sanchez, a Model Academy Principal remarked, "Selecting a career academy is a not a one-day event with a guidance counselor. Communication, planning and design of programs has to take place to make sure that 9th graders can make an informed decision when they select their academy."

Making sure students understand their career options is also important for John A. Dubiski High School in Grand Prairie, Texas. Dubiski hosts fifteen pathways arranged into three academies. Principal Larry Jones discussed a common problem that can arise when students don't understand the career options, "Teachers in pathways were upset that students were not interested in their programs. Students were upset because they didn't know what was offered, what the course work would be like and didn't have a clear direction for high school. Some students chose a pathway because their friend was going into that pathway or because they thought they might like that career. We needed a way to showcase all of the different possibilities Dubiski offered and do it in a way that really got students engaged."

To help students make educated choices, Dubiski High School established a program that showcased the different pathways available for students. At this event, industry professionals, talk to students about their career and school staff discuss what it's like to be in the pathway. On a larger scale, students also participate in the GPISD Experience. As an open enrollment district, educating more than 29,000 students each year, GPISD invites students from across the Metroplex to attend any school for free. Starting as early as Pre-K and continuing through high school. It's an opportunity for parents and students from all over the district to explore and discover the perfect educational setting or choice of pathway for their child.

Principal Jones notes, "the GPISD Experience is a 'test drive' of the different schools and programs, and it is also the opening of our application process where we can really highlight our academies and attract students. But we have also noticed that the number of students who request pathway changes is minimal."

NSOP 2 Academy Design, Section b. Student Selection promotes the idea that, "...students are provided an orientation to the academy based upon their own talents, aspirations and interests. Parents or guardians participate in this process and approve of the choice made by their son or daughter..." The GPISD Experience helps students make informed choices and at the same time, allays the concerns of parents who may be worried that their child has to decide on a career path in the 10<sup>th</sup> grade.

Schools should offer multiple experiential learning opportunities to engage students in thinking about their future career. The ideas outlined above (career fairs, shadowing, Freshman Seminar Course) all help students choose an Academy that is right for them and in doing so, helps create the conditions necessary for a successful high school experience. But it is also important to design Academies that have broad themes that integrate challenging academics with career and technical electives that are relevant to many careers. The promise of academies is to make learning relevant, to use the theme or career focus of the academy to teach "through." Thereby ending the familiar, "Why do I need to learn this?"

Partnerships for School and Community Transformation

Germantown High School, Madison, MS Jonesboro High School, Jonesboro, AR Maplewood High School, Nashville, TN Northeast High School, St. Petersburg, FL

From its inception, business has played a key role in the success of the Academy Model. Business leaders, and teachers worked side by side in Philadelphia to create and shape the first academy – the Electrical Academy. Together they created a structure and experiences that many years later, we would call, the cohort schedule, interdisciplinary teams, cross-curricular teaching, and even project-based learning. It was this coming together of a group of individuals from diverse backgrounds that allowed for innovation. Partnerships continue to be the heart of the academy. They are as varied as the schools and communities that welcome the partnership. Some provide advice on curriculum or financial support for equipment. Others provide expertise, work-based learning opportunities, and externships for teachers.

Businesses have a vested interest in their communities. Many businesses want to give to the community but sometimes they aren't sure where to start. Usually it's up to the school to reach out to business. Mike Hernandez from Northeast High School in St. Petersburg, Florida discusses some strategies for finding partners. "We have learned from our failures and successes in this area. The goal is to create a board where the community partners are really committed to the academy. We start by surveying our students and their families to see if their careers might tie into the Academy. Always start within, sometimes the best partnerships are right under your nose. Then, we reach out to community organizations like the Chamber of Commerce or the Mayor's Office. Our CTE office also helps by reaching out to businesses."

Hernandez knows that It's one thing to assemble business partners but, it's another to have those partners engaged in what NSOP VI calls a healthy partnership, "...both through the advisory board and other interactions there is evidence of a partnership between the academy/high school and its host community that recognizes both employer and school district short and long-term needs. Evidence exists that the advisory board is engaged and exhibits as much ownership of the academy as the staff does..."
Hernandez notes, "We work to empower them in the decision-making process and develop projects and tasks that we work on together. This develops 'skin in the game.' All members are actively participating in building a rich experience for students.'

Another design aspect of an academy advisory board is that it aligns with the academy career field and is selected to align with the economic and workforce development needs of the community. This ensures that there is preparation for the future workforce and also kindles a desire to participate from the business. St. Dominic's Healthcare System is an active member of the advisory board for the Academy of Healthcare Excellence at Germantown High School in Madison, Mississippi, and provides clinical internships to seniors. The Ornish Program at St. Dominic's Health System allows students to work directly with patients that have suffered a heart attack or stroke. Students learn the diets and exercises necessary for the patients. Academy Principal Brent Brownlee had high praise for the hospital. "St. Dominic's is also a key participant in the district-wide 9<sup>th</sup> Grade Health Science Career Fair where students rotate through stations to learn about job opportunities at the hospital—not just doctors and nurses—but the whole range of careers. It's a unique opportunity for students across the district and helps them think about what academy they will choose."

Sometimes it's the businesses that seek out opportunities for involvement. Principal Jeff Flanigan of Jonesboro High School in Jonesboro, Arkansas tells the story of how the global company, Unilever found them. "We struggled with sustainability in our business partnerships. Internships felt more like job shadows and there weren't strong relationships member organizations. That all changed when out of the blue I received an email from Erik Gibson, the Safety Health and Environment supervisor at Unilever. He was inquiring about Unilever becoming a member of our STEM Academy Advisory Board. I told him we'd love to have Unilever on our board and invited him to our next meeting. The meeting was the next day. And he showed up!"

Unilever, Flanigan explained, wanted to be part of the academy because they were interested in developing a "homegrown workforce" and to increase opportunities for female and minority technicians at the company. "We developed an agreement called, The Unilever Promise. STEM students taking a select set of classes would be eligible for a paid internship with Unilever. Upon graduation, they would work full time. Unilever would pay for them to get an Associate's Degree with options for advancement and continued employment at Unilever. This was a game changer for our school."

Once a company is fully invested in the academy and feel that they are a full partner, there is no limit to how they can transform a school. Keely S. Jones-Mason, principal of Maplewood High School experienced the "gung ho" enthusiasm of several of Maplewood's business partners. "We have amazing business partners, Bridgestone Firestone, was our first partner to change a physical space. They worked with the Academy of Entrepreneurship and Innovation to create the "Maplewood Automotive Complete Auto Care facility. Saint Thomas Hospital was next. They built a clinic within the Academy of Sports Medicine and Wellness. Not to be outdone, Nashville Electric Service and Stansell Electric worked with the Academy of Energy and Power created an Outdoor Energy and Power Training Lab. All three physical spaces provide on-site experiential learning experiences for Maplewood students. The clinic and automotive services are open to the community and helps engage the wider community in the life of the school. "We let our partners in freely. We have developed a strong bond as we work together for the success of our students."

These examples are just a few that demonstrate that authentic and quality employer involvement in education is transforming the way schools and communities join together in the work of helping young people achieve success.

# Addressing the Challenge of Cultural and Language Barriers Antioch High School, Nashville, TN

Antioch High School is home to approximately 2,200 students, and was one of the first schools to implement the academy model in Nashville. Like many Nashville schools, Antioch has a very diverse population. Many students have to overcome cultural and language barriers and this can put them at a disadvantage. Issues of language, religion, perceptions of self and others, values and even *rules* for communicating with adults i.e. eye contact and gestures need to be taken into consideration when working in a school as diverse as Antioch.

Brandi Price, assistant principal described one of the ways Antioch helps with the challenge. "This challenge was addressed through Project Based Learning or PBL units that helped to reach across content classes in order to help students focus on their possible secondary and post-secondary opportunities." Antioch also found an interesting connection for most students with a story in a popular book, Price explained, "We used the book, *Outliers* written by Malcolm Gladwell. In chapters three and four, entitled, "The Trouble with Geniuses, Pt. 1 and Pt. 2," students learned about the genius of Chris Langan, a man with one of the highest IQ's ever measured. They read that Langan grew up in a very broken, dysfunctional and economically-challenged family and that despite having an IQ higher than Albert Einstein, he wasn't able to take advantage of opportunities. Students heard how he couldn't get financial aid because his mother didn't put her signature in the right place on the FAFSA form. Then when he tried to advocate for himself, he was unsuccessful because he couldn't communicate properly due to type of home life he had. Student identified with this story in a very strong way."

This activity was not only beneficial to the students, but validated Antioch's annual FAFSA Night that helps students and families understand the form, clear up misconceptions, and receive the funding they need for their children to attend college. "Our business partner, Deloitte and Touche provides free services to the families by providing translators to help students and families correctly fill out their financial aid forms. They also provide dinner for the families and their siblings in order to help with childcare issues."

Working together Antioch and Deloitte and Touche help meet the challenge of cultural and language barriers by providing crucial instruction and opportunities that encourage students and their families to acquire the skills needed to improve their chances for a successful future.

#### Frank H. Peterson High School, Jacksonville, FL

Frank H. Peterson High School in Jacksonville, Florida was named after the founder of Gator Trailers, the only pleasure boat trailer manufacturing company in the southeast United States. Peterson managed the company until 1963, but remained an active member of the business community. Working with local businesses, he realized that the school system needed to focus on the employability skills required within the community. Like today's academies, Mr. Peterson gathered support of Jacksonville businesses and introduced the first Marine Mechanics course in northeast Florida and worked with the Duval County Public School System to create a curriculum.

His idea caught on and more businesses wanted to be involved and create their own industry-focused programs within the school system. Peterson enjoyed building partnerships with schools and was often called on to provide support and advice for career and technical education for the State of Florida. The Westside Skills Center, established in 1969 was formerly renamed in Mr. Peterson's honor in 1997. He would love to have seen today's school with its seven National Model Academies and its continued focus on creating programs that focused on community needs. He understood that schools and business working together created opportunities for students to succeed.

Frank Peterson High School continues that tradition of strong ties to the local business community. Their Model Academies demonstrate NSOP 8, which reads in part, "...The academy career field is selected to align with the community's industries and employer base to allow for adequate involvement of volunteer employees in certain of its activities...." and "Representatives of employers...help to guide the academy's curriculum, and provide experiential components such as speakers, field experience sites, shadowing opportunities, mentors, student internships, community service opportunities, college tours, and teacher externships."

Assistant Principal, Christine Bicksler described how their partnership with Naval Fleet Readiness Group helps provide students from the Aviation, Automotive, and Robotics/Manufacturing academies with an opportunity for employment after graduation. "The Fleet Readiness Group had many skilled job openings for mechanics and other positions for students who could work on vehicles and vessels. The challenge was getting this information out to students and presenting it in a way they would understand the significance of this opportunity."

Dr. Bicksler and her team had to design a comprehensive plan that would help students "see themselves" working at Fleet Readiness. "We were building relationships over the course of several years. It would not have been effective as a one-time career fair."

Here are some components that made the partnership successful.

- 1. Multiple field trips were arranged to the Fleet Readiness site so students could see first-hand what they could be doing after graduation.
- 2. Fleet Readiness came to several senior meetings and spoke to all seniors. They also had a table in the back so students and parents could speak with them after the meetings.
- 3. There was a special assembly for Juniors and Seniors from the three Academies where they listened to representatives from different Fleet Readiness departments.
- 4. The school held a career fair where students were able to drop off resumes, ask questions, and in some cases be interviewed on the spot.

At the last career fair, twelve students got hired on the spot and started working after graduation. They start at an E3 rank with full benefits, and a retirement plan. But the school didn't stop there. Instead they used the opportunity to communicate their commitment to all students. Bicksler explained, "We wanted our junior and sophomore students to see the success of the seniors, so on our Senior Academic signing day, we also recognized all of the students hired by Fleet Readiness and other businesses as well. Representatives of the business that hired the students were there and handed them a certificate of hire, shook their hand, and took a photo. They were recognized in the same way the seniors going to college or the military were recognized. The students' parents were there, and it was an extremely emotional day seeing students, many of which struggled through academics throughout their 4 years, in a shirt and tie, shaking the hand of their new employer. The parents were there beaming with pride for their student. We allowed all of our junior students to watch the assembly because we wanted them to know they could be recognized for their hard work, even if they weren't at the top of their class academically."

To achieve this kind of success, preparing students to meet employers needs to be intentional. Resume writing, interview skills, and understanding how to dress should be part of the process. Discussing dress can reveal that some students may not have the appropriate clothes. Dr. Bicksler recalled, "I will never forget seeing a certain male student who I had never seen in anything other than t-shirts and slouchy jeans, rushing around in a shirt and tie nervous for the interviews. He was a student we all knew well as he was in the halls almost as often as he was in class for his first three years, but when we asked him why he was dressed up for the day, he very proudly responded that he had an interview. He was a student that came from extreme poverty and a single parent home. He was wearing a shirt that one of our counselors had bought for him. He went on to get hired right after graduation. Seeing him smile and puff up with pride was a moment I will not forget."

Working closely with the business community to create a system of career awareness also had an unanticipated outcome. The school noticed that when the students found out that employers were interested in them, their confidence skyrocketed. "Several of them were failing core academic classes, but once they knew they had a job waiting, the grades came up pretty fast. Several of them even became college ready in reading and math and earned their industry certification. We learned that when students are informed of their options, given the opportunity to meet employers, and seeing that they can be successful even without college, they found a new sense of purpose"

Frank H. Peterson High School and its seven Model Academies do business partners right. Following in the footsteps of their namesake and aligning their academy programs with community businesses works to the benefit of all. "Once we found employers that were interested all we had to do was let them in!"

Certifications: Anchors for Career Academies John A. Dubiski Career High School, Grand Prairie, TX

One of the most impactful elements a career academy can provide to students is industry-backed certifications. Certification programs can coincide with regular coursework and validate the student's mastery of key concepts and help them stand out in a crowded pool of applicants. Certifications keep students engaged and allow them to experience real world demands of a chosen career field. A valid certification truly represents "Industry Standard."

Principal Larry Jones of Dubiski Career High School in Grand Prairie, Texas knew that to compete, his students needed more than just a diploma. He also didn't want to wait until a student was in the 11<sup>th</sup> or 12<sup>th</sup> grade to start thinking about a career and what kind of industry certifications they needed. Instead, Principal Jones decided that his incoming 9<sup>th</sup> grade students needed to be exposed to the workforce and create a mindset focused on a career of their choice during high school. That's when Dubiski decided to make a special effort to make sure certifications were available to all students.

"We created a committee to review certifications that were available, explained Principal Jones, "and we identified certifications that would integrate with the current pathways. Freshmen needed to be engaged in the pathway and set the expectation for focus on a career. We looked at workforce certifications focused on those things that would be most beneficial during their selected four-year plan. We started calling it the "Big 4". This composed of Customer Service and Employability, and Wilderness First Responder (WFR) certifications."

That led Dubiski to start thinking of other certifications. "We wanted to make sure students understood cyber-safety and how it relates to their career, so we also implemented the cyber safety certification." At the same time, the school district realized that

they needed to allow OSHA certification to allow students to work in industrial setting for all programs. "We felt it was important to allow certification opportunities at all grade levels of their career pathway. We offer certifications at each grade level so students can leave Dubiski with several certifications leading to a successful post-secondary opportunity," Jones added. In regards to funding Dubiski was fortunate to have funding provided through the CTE department for the "Big 4" certifications at 100%. The school district pays the first \$80 of any industry certification and asks the students to pay the remaining cost. Principal Jones believes that this arrangement, "has created buy-in for the students to be prepared to pass the certifications."

The results of Dubiski's efforts are impressive. With Dubiski as the driving force, the District went from 690 Certifications in School Year 2014-14 to a remarkable 6,895 Certifications in School Year, 2017-18. Gaining an industry certification signals to both potential employers and prospective colleges that this is a young person who is not afraid of challenges. "We're giving students the skills they need in a particular area, but we're also giving them skills that are going to transfer to whatever they want to do," Principal Jones added.

### Working Together to Create Opportunities for Students

#### Cane Ridge High School, Nashville, TN

Internship programs not only help students connect the dots between work and school, but also empowers and inspires them to visualize college and career pathways previously thought unattainable. Finding business partners, establishing relationships and managing the process can be difficult. The Nashville Pencil Foundation helps schools connect with businesses and helps schools establish systems for internships and other work-based learning activities. Once the relationship is established, the school and the business are able to work out the details of the partnership, tackle issues that might arise, and share ideas for new programs that benefit both the student and the company.

Cane Ridge High School's partnership with St. Thomas Hospitals is an example of how a school and the business partner work together to shape a project. Principal Michel Sanchez, explains, "St. Thomas made a commitment to MNPS to help train students to pass the CCMA (Certified Clinical Medical Assistant) exam. If a graduating senior passes the CCMA exam, St. Thomas will hire them to work in their hospitals. The starting pay for these positions ranges from \$13-\$15 dollars an hour. Key to making this program work is the hospital assigning one of their employees to visit Cane Ridge once a week to meet with the selected seniors who prepare for the CCMA exam."

Rising Cane Ridge Seniors apply for one of the 12-15 slots available to train with St. Thomas during their senior year. Though the partnership exists with St. Thomas, several challenges still have to be worked out to ensure the success of these Academy of Health Management Seniors:

- Seniors must make a commitment to train for the CCMA exam all year as well as take the CCMA which is paid for by the district (\$150 per exam).
- Seniors must enroll in an additional CTE Health class that is dedicated to the CCMA exam.
- A CTE Health Teacher commits to teaching the information needed for the CCMA exam when St. Thomas employee is not on campus.
- Additional study materials or equipment must be available to assist the students as they prepare for the CCMA exam.
- The CTE Health Teacher and St. Thomas employee must have a healthy professional relationship where collaboration is evident and where students know they are in positive learning community.

Principal Sanchez discussed the importance of teacher involvement, "Adrienne Mayo, CTE Health Science teacher has been working with the "St. Thomas Health Scholars" program for the last two years. She is a 14-year experienced Health Science teacher who embraced this new opportunity for seniors. Ms. Mayo had to show the students how enrollment in the additional health class would benefit them in the future." It is also important to prepare the seniors for the training sessions with the St. Thomas employee. "Seniors sometimes did not take their training sessions with the St. Thomas employee seriously because they

did not have as close a relationship with the St. Thomas representative. So, in addition to the preparing the students to study and prepare for the exam, Ms. Mayo had to continually model and reinforce employability skills and expectations of behavior when an external coach is working with students."

For the last two years, Cane Ridge High School has had the top three passing rates in the district for the "St. Thomas Scholars" program. Out of 28 students who have taken the exam in the last two years, 22 have passed the CCMA exam. "The relationship between business partner and school must be nourished. There was a learning curve on both sides. But in the end, we created a solid program that will benefit students for years to come." High school students leaving with a certification that impacts their earning potential is powerful. More opportunities need to exist for students to leave with a marketable skill. Cane Ridge High School is grateful for the partnership with St. Thomas Hospital and looks forward to more partnerships that will provide high demand certifications.

Equity in STEM – Changing Perceptions About What It Takes to Succeed The Academies at Jonesboro High School, Jonesboro, AR

"Dr. Flanigan, I really wanted to be in your academy, but I'm not smart and my mama said she couldn't pay for the computer if something happened to it."

"I was crushed. I vowed to never have another student say or feel that."

Dr. Jeff Flanigan, principal of the STEM Academy at Jonesboro High School, Jonesboro Arkansas talks about starting the academy and the importance of challenging perceptions of both adults and children. "When we began the Academy journey at Jonesboro, STEM was by far the smallest of the three academies. We only had 173 students while our other two academies had over four and five hundred enrolled. We had many of the top students in the initial graduating class. In the first class, several of our students were in the top ten graduates and for the first time in school history, there was a five-way tie for top student. We were happy to have such high achieving students but the academy counselor and I were not pleased with the "optics" of our academy. We were a predominately white, male academy. We had less than 15% female enrollment and less than 15% minority. We were the only academy to give every student a MacBook Air computer. We thought this would really be a great recruiting tool. We were wrong. Giving each student such an expensive computer, only served to further a false perception of elitism in our Academy. That all came to a head one day while I was on lunch duty in the cafeteria and an African-American male 10<sup>th</sup> grade student came up to me and told me he wasn't smart enough."

"We had a STEM Academy faculty meeting the following Wednesday. I asked the faculty to write down their description of a STEM student. The responses were not surprising, 'good in math,' 'high achiever,' 'interested in science,' 'comes to school every day.' These were all the same misconceptions that the students had. When we reviewed the results, we know that we had to start with ourselves before we could attract a diverse student population."

Dr. Flanigan and his team realized that they had to work on their own perception of an "ideal" STEM student, they started demystify STEM and supply students and their families with the correct information so that they could make well informed decisions about joining the STEM academy and their future career path.

Some of the most common misconceptions regarding STEM include:

• STEM classes are too difficult. STEM classes are often perceived as being more difficult than other subjects not only by students but also by parents, who want to ensure their child's maximum possibility of achieving good grades. In academies, Project Based Learning brings subjects to life allowing students to relate to these subjects in a 'real-world' context. When students also get a chance to engage in hands-on science and engineering, they can see that the real-life application of the subject, making it easier to relate to and inspiring and motivating them to go further.

- STEM subjects are for boys only This remains one of the key misconceptions around STEM subjects. Although the STEM workforce is crucial to our innovative and economic growth, women are underrepresented. This may be due to a number of factors including lack of female role models and gender stereotyping. Major opportunities are now plentiful as employers see the need for more women in STEM not only for reasons of fairness and equity but out of innovation and economic necessity.
- STEM careers lack creativity. STEM careers require lots of creativity and innovation and are centered on resolving problems with imaginative solutions. Albert Einstein stated that 'The greatest scientists are artists as well.' Without creative and imaginative thinking, STEM would not be fulfilling its role.

At last count, Jonesboro STEM academy had over 400 students. Dr. Flanigan was pleased, "Almost 40% minority and 35% female. When we addressed our own perceptions, we were able to change the demographics of our academy. We started a "Girls in Stem" initiative, the president of our STEM Club is female and the STEM student of the year is a Female." The turnaround is impressive. As educators become aware of their own perceptions, they can help underrepresented students including low-income, female, and minorities learn more about how they can have success in STEM Careers.

Lessons Learned: Building an Academy Team Bryan High School, Omaha NE

Bringing the world of agriculture to Omaha urban students cannot be done without having a highly qualified Agriculture Education instructor. Finding a skilled instructor for the academy has yet to be an issue but keeping them in the metro area has been a challenge. In the 7 years of program existence this academy has seen 3 different Ag instructors. Teaching urban students about agriculture who come from diverse backgrounds is new to the state of Nebraska. A metro school has not had an FFA chapter since the early 80's. It should be fair to assume that agricultural education teachers come from rural Nebraska towns where FFA chapters, agricultural education and farming are prevalent and dominate the job force and economy in these small western communities. The two previous instructors came to Bryan with excitement and passion, committed to see this academy become the culture of the school and community. Rustic family ties called them home to western Nebraska after a short time in Omaha. 3 teachers in 7 years for this academy would be an alarming statistic for any stake-holder vested in this new program but strong foundation was laid to make each transition a smooth one. The Urban Agriculture College and Career Academy would be built upon best practices, NCAC's NSOP and most importantly teamwork. Unique programs built around talent at the time often crumble when those assets are no longer present.

The academy team consisting of academic and career education teachers is built around teachers who are committed and who display best practices in classroom management and pedagogy. The leadership team designed and created a strong culture and set norms for the team that would be able withstand turn-over like has been seen. Having a solid foundation has allowed a smooth transition for new team members joining the academy. Two of the original team members remain from the teams six teachers. Despite all the team building programs staff may attend or the emphasis that is placed on teamwork to achieve goals, teams fail because leaders and individuals fail in the way they treat each other. Building a team resume, developing team expectations and responsibilities was critical to keeping a sustainable and effective academy team.

Teachers use common planning time to create interdisciplinary lessons for academy courses. Some of the lessons and project-based learnings are built upon from year to year. During team meetings teachers are also given the opportunity the share student concerns and celebrate student growth. Academy teachers have students over the course of 3 years and can differentiate lessons based on preferred learning styles and develop strong relationships with students throughout those years. Team meetings occur 2-3 times a week. One of the meeting topics on a rotating basis is "academy health/team building". This allows for a more natural environment and to focus on team building skills using a variety of strategies. Based on individual strengths, academy teachers contribute to academy functions using those strengths. For example, a teacher who has strong organizational skills keeps the master calendar and deposits funds into the academy account.

Without having a strong team in place, it would have been impossible to keep the academy design in place to achieve National Model Status. Members of the team have played a critical role to ensuring new team members feel welcomed and are given the tools for success. The FFA chapter at Bryan High recently had a student become a State Officer, the academies first. She dreams of becoming an agriculture education teacher and one day join the academy team at Bryan or start another agriculture program in an urban school similar to Bryan's. She has created an unintended vision for our academy to "grow our own" with hopes to attract more urban students into the teaching field that is dominated those from rural Nebraska. This academy grew to "model" from the passion of teachers wanting to make this happen for students and to build belonging to something meaningful.

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