



College Preparation in the 21st Century

by Chelsea Parker, smaller learning communities program manager, Metropolitan Nashville Public Schools

The traditional dichotomy between college preparatory and vocational training in high school is a stumbling block to effective secondary education in the 21st century. The requirements of American careers have changed, and the U.S. education system must adapt to remain relevant. Incorporating college and career preparation as part of the same educational process grounds academic studies in concrete application.

In Nashville, we prepare students for college by providing career exploration earlier, restructuring high schools to bring academic studies to bear on real-world problems and fostering community engagement.

Getting prepared

Starting early with career-based college prep helps students reap maximum benefit from high school and college. The recent Harvard study, “Pathways to Prosperity,” argues: “If high school career-focused pathways were firmly linked to community college and four-year career majors ... more students would be likely to stay the course. This is an exceptionally promising strategy for increasing post-secondary attainment.”¹

When students see a purpose for their education, they are more likely to value it, graduate from high school and go on to complete post-secondary education. Beginning career exploration as high school freshmen encourages students to take their studies seriously and enables college preparation because they see their classes as stepping stones to long-term goals.

Increasingly, the most important skills for students to be successful in college and careers are soft skills that often are absent from high school and college education. Businesses repeatedly identify professionalism, teamwork, oral communication, foreign language, critical thinking and creativity skills as those that are lacking.²

Nashville is bridging the skills gap between students and the working world by emphasizing 21st century skills. This gap is partially responsible for high dropout rates in college because students lack the focus and work ethic necessary to make the most of their college education and cannot rely on advanced academics alone. To address



dropouts and the skills gap in Nashville, industry knowledge is taught in addition to academic college requirements to help students understand their future options and what they need to do to prepare for them.

21st century skills

Through application-based learning and real-world problem solving, the Academies of Nashville foster and reinforce the 21st century skills students need. Regardless of the academy they choose, students take all the academic courses required to meet college entrance requirements. The difference is that they apply their academics to real-world situations within an area that interests them. They choose from updated offerings that lead to post-secondary education and align with high-skill, high-wage careers that are in demand.

The Harvard study advocates for a more nuanced pathways system “that is richly diversified to align with the needs and interests of today’s young people and better designed to meet the needs of a 21st century economy.”³ The Academies of Nashville meet this need by allowing students to enter career-themed academies and choose a focus. For example, a student might pick a health academy, focus on emergency medical therapeutics, take honors classes and graduate with a certified nursing assistant’s license before going to college. In this way, students in the Academies of Nashville prepare for potential majors before entering college.

Structure needed

Career-based college preparation relies on a structure that focuses on career themes. Schedules, teacher teams and the physical layout of a school affect students’ experiences. In Nashville, first-year students enter a freshman academy that helps them transition into high school, which addresses the largest portion of our dropouts.⁴ For the final three years, they join a themed academy for which they take college prep classes structured around the academy’s theme and complete three career-themed courses to achieve deeper understanding of their field of interest.

This format aligns with Tennessee’s graduation policy, which requires three credits in a focused area, as well as courses needed to attend four-year colleges. The Harvard study suggests the type of pathway format used by the Academies of Nashville



will increase the number of students who pursue and receive post-secondary degrees.

School structure must foster an interdisciplinary environment that brings the intellectual tools of academic training to real-world problem solving. In the Academies of Nashville, teams of teachers from different disciplines have collaborative planning time to develop interdisciplinary, project-based activities and student interventions. This arrangement produces more integrated coursework, provides support systems and customizes professional development.

As a result, the academies have seen lower discipline rates and increased student engagement.⁵ Transitioning to block scheduling as a district is also increasing opportunities for learning experiences outside of the classroom. Longer class periods and increasing workloads to eight credits per semester permit more field trips, job shadowing and in-depth project work that reinforce the theme of each academy and facilitate greater learning in context. This scheduling change allows students to complete career exploration and pathway courses, have more time for advanced coursework and earn college credit through dual-credit and dual-enrollment programs.

The freshman academy creates a close-knit community of students and teachers to help students transition to high school and explore how schoolwork provides the foundation to pursue their interests in college and careers. All students take a freshman seminar course that offers broad career exploration and assists students in choosing one of the district's 43 career-themed academies, such as the academy of medical science and research at Glenclyff High School or the academy of digital design and communication at McGavock High School. Freshmen also attend a districtwide career exploration fair where hundreds of local businesses and organizations host interactive displays to educate students about professional skills, career options and the post-secondary education required for different career paths. Students learn to interact in a professional setting and gain perspective about how their education is linked to future opportunities.

The Academies of Nashville link high school course pathways to the post-secondary programs that lead to the students' desired careers. The curriculum is aligned with college prep and industry standards to ensure students apply their studies to solve real-world problems using up-to-date technology. This helps students think about their



futures, see the reasons for their education and relate their academic knowledge to real-world situations for deeper learning.

Community engagement

The Nashville community's support is critical for rigorous, college-prep academies. The Harvard study concludes by identifying community engagement as the link that can make the difference: "If we could develop an American strategy to engage educators and employers in a more collaborative approach to the education and training of the next generation of workers, it would surely produce important social as well as economic returns on investment."⁶

As the primary stakeholder, the Nashville community supports education and reinforces professional skills and work habits that will enable students to be successful in college.

Simply enrolling in college does not guarantee that a student is prepared to succeed and graduate. Lack of professional skills and inability to see the big picture are two major factors that drive up high college dropout rates.⁷ The Academies of Nashville address this knowledge gap with the help of the broader community. Building a structure of business engagement to facilitate assistance, advice and advocacy effectively exposes students to 21st century skills, career exploration and understanding of the post-secondary requirements for their desired career paths.

The Academies of Nashville depend on a close relationship with the larger community to provide students with educational experiences that will contribute to their long-term goals. Hundreds of local professionals support the academies by volunteering, donating and sharing their knowledge with academy students. Academy partners work with teachers and students to customize real-world learning experiences. The teacher team externship program allows teachers to work hand-in-hand with local businesses to experience professional working environments, create realistic project-based curricula and embed 21st century skills into their classrooms. Six broad partnership councils, facilitated by the Nashville Area Chamber of Commerce, advise academies to ensure they align with college and career requirements. The chamber's CEO champions—a group the mayor co-chairs—provide high-level advocacy. Broad community support and high-level leadership allow the most dynamic minds in Nashville to play a role preparing

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students for the realities of tomorrow by showing them that their high school studies are an important step in planning for the future.

By structuring the high school curriculum around application-based learning in context, the Academies of Nashville prepare students to face the myriad challenges of post-secondary education and the working world beyond.

This is an increasingly connected and interdependent world, and the academies provide students not only with the necessary academic training to understand that world, but also the interpersonal and communicative skills they will need to work in the dynamic professional and intellectual environments of the 21st century.

References and notes

1. Harvard Graduate School of Education, "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century," February 2011, p. 13.

2. The Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families and Society for Human Resource Management, "Are They Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce," 2006, p. 31.

3. "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century," see reference 1, p. 11.

4. According to our external grant evaluator's report on the eight schools that originally received grant funding to implement small learning communities, from the 2008-2009 academic year to the 2009-2010 academic year, the percentage of first-time ninth graders that earned enough credits for promotion to 10th grade increased from 71.9% to 77.4%.

5. Between 2007 and 2010, internal research compiled by Metro Nashville Public Schools on all 12 of the district's high schools showed a 66% decrease in the number of students with 35 or more days absent from school, a 1.2% increase in average daily attendance, a 40.7% decrease in the number of days lost due to out of school suspension and a 35.5% decrease in discipline referrals. This time frame coincides with the major implementation phase of freshman academies and the Academies of Nashville.

6. "Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century," see reference 1, p. 38.

7. In *The Ambitious Generation: America's Teenagers, Motivated but Directionless* (Yale University Press, 2000), Barbara Schneider and David Stevenson studied the disjuncture between students' ambitions and their understanding of the educational achievement necessary to fulfill those desires. At the best of the three



schools that were studied, only 44% of students already had planned to attain the education required by their intended occupation (p. 118).

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