



CASE STUDY

Moore County Schools (NC): Rethinking Career & Technical Education to Provide Skills Employers Really Want

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Moore County Schools: *Rethinking Career & Technical Education to Provide Skills Employers Really Want*

Is college matriculation really the right objective for all students? Recent research, including the headline-grabbing *Pathways to Prosperity* report from the Harvard Graduate School of Education, has brought this question back into the forefront of education policy and district planning. Preceding the recent reports with apparent prescience, Dr. Susan Purser, Superintendent of North Carolina's Moore County Schools (MCS), actively pursued a new strategy for the district's Career and Technical Education (CTE) programs.

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Beginning with a frank assessment of the district's CTE performance to date, Dr. Purser led her executive and CTE teams, as well as the school board, through some difficult strategic questions. How should success in CTE be defined? Does that definition match what we are doing today? How successful are we at delivering results? Is there a way to serve children and the community more effectively given the resources we have? With support from The District Management Council (DMC), Dr. Purser and her team are now focusing on three strategic areas: increasing alignment between CTE offerings and local employment needs, creating and deepening partnerships between the district and key local employers, and strengthening ongoing management of the district's CTE programs.

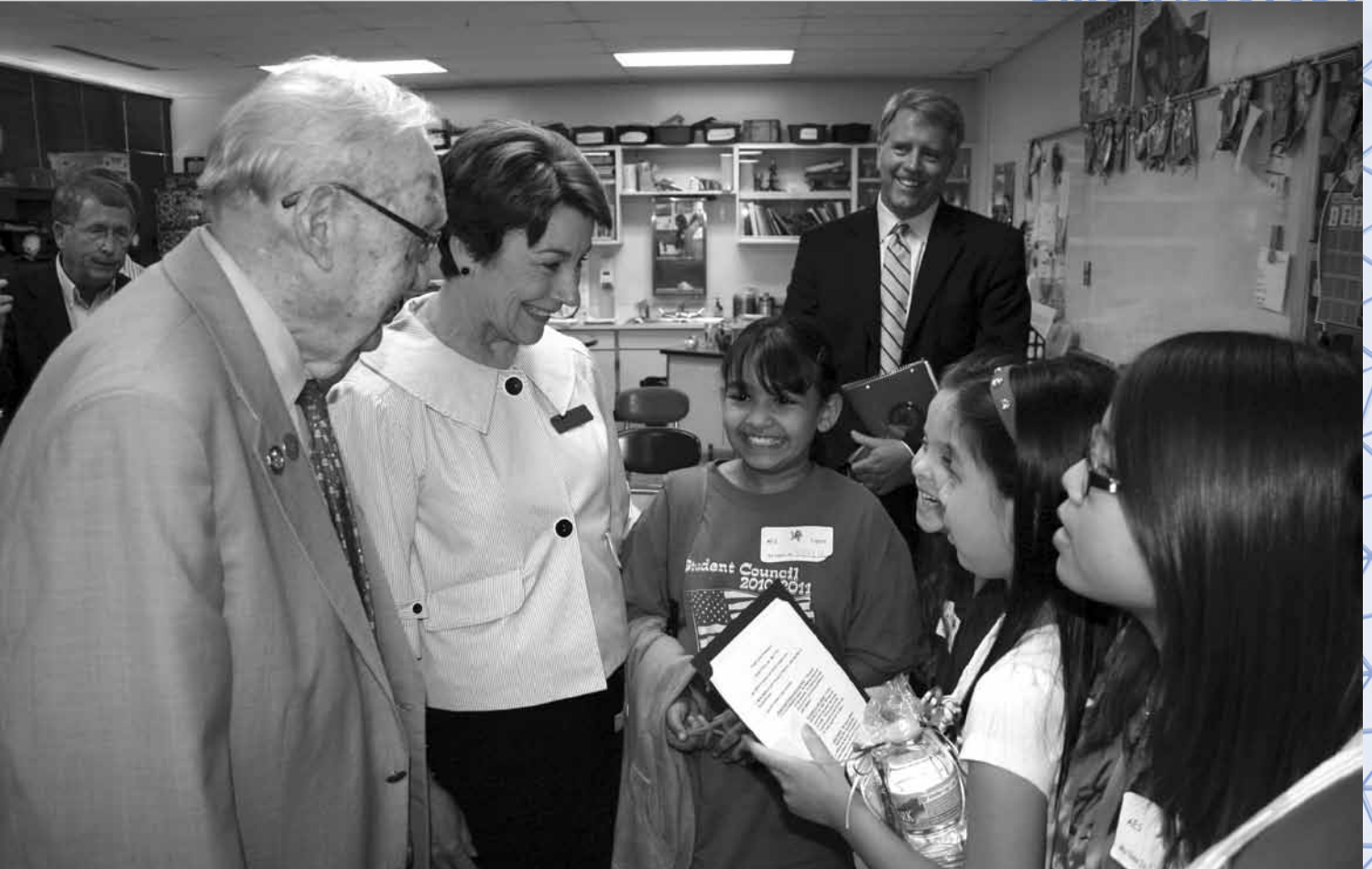
The MCS team found that the structure and subject of course offerings could be more closely aligned with local economic and employment trends. For example, the district is considering adding programming to respond to specific local, high-growth sectors, including human services. Second, using local partners to advise and inform the district's CTE offerings as well as provide real job exposure to students is a national best

practice that Moore County sees further opportunity to expand. Third, to help the district stay nimble with regard to CTE, Moore County leaders are seizing an opportunity to use performance management data more strategically to set goals, judge success, and focus on continuous improvement.

Moore County Schools (NC) Fast Facts

- Superintendent: Dr. Susan Purser (2004 - present)
- 12,340 students (2010-2011)
 - White: 67%
 - African American: 20%
 - Hispanic: 8%
 - Other: 5%
 - Receiving Free/Reduced Lunch: 42%
- 1,794 total staff (2010-2011)
- \$108,367,623 total budget (2010-2011)

Source: MCS



Moore County Superintendent Dr. Susan Purser talks with students and community members. MCS plans to strengthen ties with local employers to help improve student success in CTE.

How is Success in CTE Defined?

The first key question addressed by Dr. Purser and her team was a big one: “How should we define success?” In many districts, this question does not have a clear answer. In light of the recent economic downturn and slow jobs recovery, the conversation might turn to *career entry* — are high school graduates actually being placed in jobs when they finish high school? Or, to be more precise, does the district’s CTE programming lead directly to placement in a job or career that the student prepared for? A more critical view on success might also lead to an examination of the quality of the jobs being obtained. Are the wages good? Is the industry growing? Is there opportunity for advancement? To evaluate success on these dimensions, districts would need to track job placement success, which few do today.

Another approach might be to define success of a CTE program as *career awareness*. Is the district’s programming successful in steering students toward

career options that are viable, as well as productive and fulfilling? Although the burden of proving success may seem lower, few districts measure how well career awareness is being instilled in the student population.

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Further, this raises similar questions of which careers should be addressed or even promoted. How should this be managed at the district level?

Lastly, probably the most common approach to defining success in CTE concerns dropout prevention. ▷

Often an unstated goal of CTE, dropout prevention allows districts to engage and retain students, and hopefully allow students to accumulate sufficient credits for high school graduation. Societal benefits are estimated to be significant — retaining at-risk students through CTE participation can stop more adverse trajectories,

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including crime and incarceration. Career and technical education has sometimes privately been called a place for “those kids” — students who have trouble learning, who may have troubled households, and who may not fit the traditional academic mold. The comments are often pejorative, but may highlight the lack of managerial focus many districts place on CTE success. To voice a common school of thought, is quiet credit accumulation with low standards a high enough bar for success?

In Moore County, Dr. Purser and her team have rejected the low bar and are actively pursuing strategies to improve outcomes for both career awareness and career entry. Fundamentally, the team posed the question: how effective are we at structuring a well-aligned school-to-career pipeline? The strategic review process included the following main components: 1) assembling an extensive “fact base” of current CTE operations in Moore County, including quantitative and qualitative data assembled from district and state records, as well as in-depth interviews with faculty members, building principals, and central office

administrators; 2) assessing Moore’s CTE operations in light of recent initiatives and reports at the state and national levels, from both government and advocacy-sourced guidance, and 3) analyzing Moore’s CTE participation against the evolving local and state job markets by participation and growth of job opportunity.

CTE Today in Moore County Schools: Some Surprises

A generally high-performing district, Moore County’s performance in CTE against North Carolina’s proficiency standards was not acceptable to Dr. Purser and her team. Overall proficiency on CTE was near the state mean, well below other benchmarks for the district. More concerning was the overall graduation rate. With a tough 28-credit graduation standard, MCS graduated only 76% of its CTE students in 2010, placing it 107th out of the state’s 115 districts. Nonetheless, as the MCS/DMC team studied the district’s data, some surprises were uncovered. Participation in MCS’s CTE courses had been growing, and is significant: approximately 65% of all students took at least one CTE course in the 2009-10 academic year. Moreover, 68% of the CTE courses taken were by students pursuing College Prep diplomas, surprising some district staff. CTE was clearly not just programming pursued by “those kids” — in fact, the programming was very popular in general. These statistics speak to the broad appeal of CTE content for a wide range of students, especially when concerning career discovery, not just those seeking employment in a chosen field immediately after graduation.

Nationally, CTE participation has remained largely flat between 1998 and 2005, the most recent data points available. Almost all students (96%) take at least one CTE course, and a majority (62%) take more than three. CTE is increasingly defined by alignment to the 16 nationally-recognized career clusters created by the States’ Career Clusters Initiative established under the National Career Technical Education Foundation. Thirteen of these clusters are currently officially sanctioned in North Carolina. Of these clusters, MCS students most frequently chose courses in the Agriculture, Food, and Natural Resources cluster, which boasts nearly double the participation of the Health Science and Architecture & Construction

clusters, the next two most popular areas. Moore County is home to some of the country's most famous golf courses, so the popularity of CTE offerings in the Agriculture, Food, and Natural Resources career track should come as no surprise. See Exhibit 1 for more detail on CTE participation by cluster. However, significant variability arose when MCS participation rates were fitted to the national career cluster definitions and compared over time. Some areas were growing significantly while others were shrinking, and the district had little quantitative data at hand to understand why demand was changing.

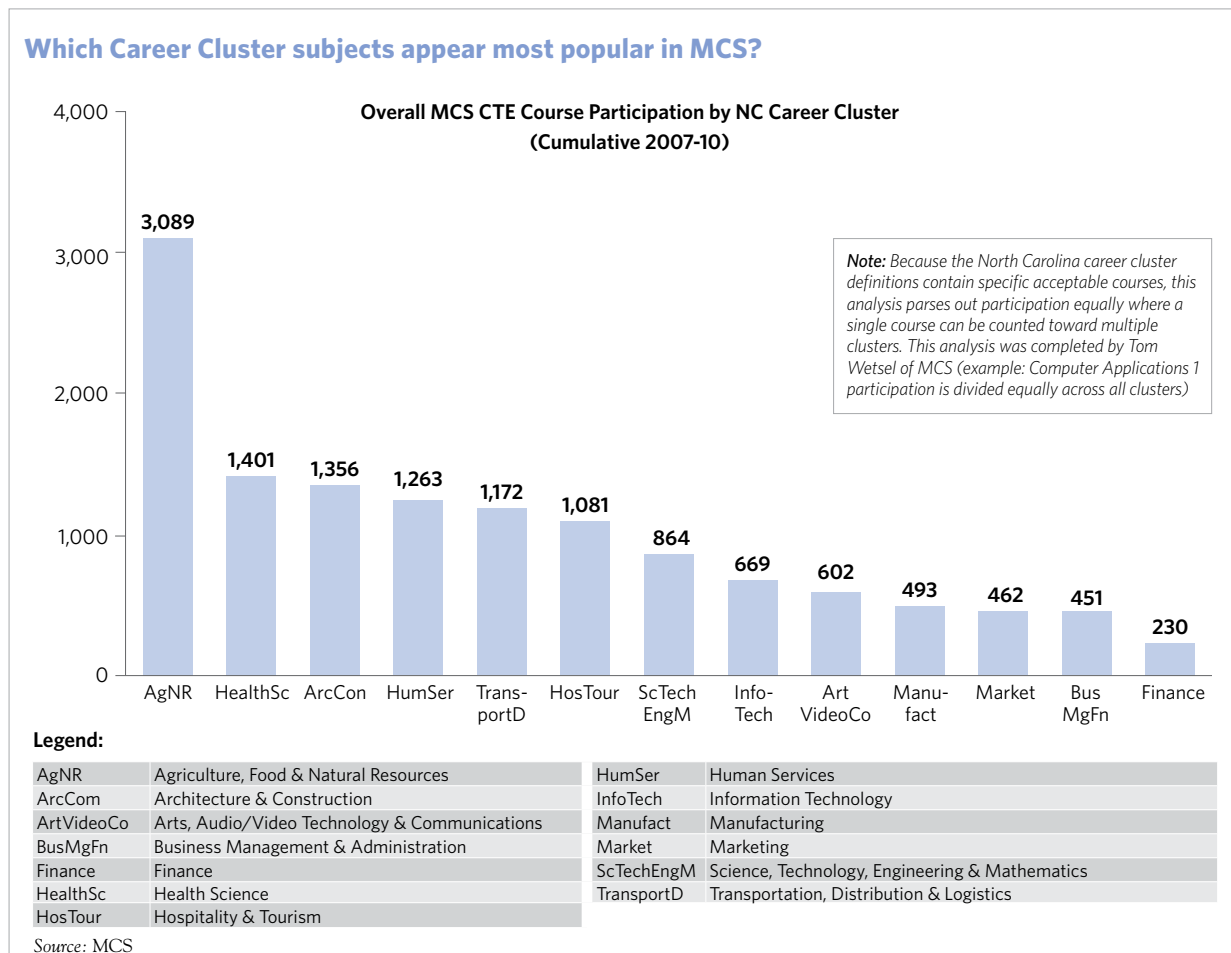
As the MCS team acknowledged, the purpose of their CTE offerings was two-fold: to build career awareness at the middle-school level, and then to prepare students with appropriate skills to lead directly to career entry upon completion of secondary school-

ing. How well aligned was Moore? What could the district do differently?

Local Alignment of CTE with Economic & Employment Trends

If a high measure of success in CTE is defined as placing students in jobs after high school graduation, which jobs should they be preparing for? Economic and employment trends are inherently local. At one extreme, job preparedness should focus on employment opportunities within commuting distance of students' current homes. At the other extreme, a district could assume a high degree of mobility and adjust programs around regional and national trends. The Moore team looked at economic and employment trends within a defined distance to gauge how aligned current offerings >

EXHIBIT 1



were to local employment scenarios. Exhibit 2 illustrates this, and also shows the regional economic zones that were used for comparative data.

Planning for economic connectivity and job preparedness requires careful attention to local and regional employment trends. Regional economic differences within North Carolina are significant. Notably, the Raleigh-Durham area to the northeast of Moore County is renowned for its Research Triangle Park and focus on biotechnology. Charlotte, in the other direction from Moore County, is home to the country's retail banking industry. Given the district's limited resources, it was important for MCS to focus on providing CTE offerings for a set of potential careers aligned with employment trends that are present in the most relevant geographic areas. Moreover, current opinion on employment trends and CTE priorities have been formed based on Moore County's *historical* trends, but these may in fact appear very different from forecasts for the relevant geography. Tomorrow's jobs are unlikely to look like today's. In Moore County, the



Moore County's restructuring of its CTE offerings means that graduating students will be better prepared to enter the workforce.

EXHIBIT 2

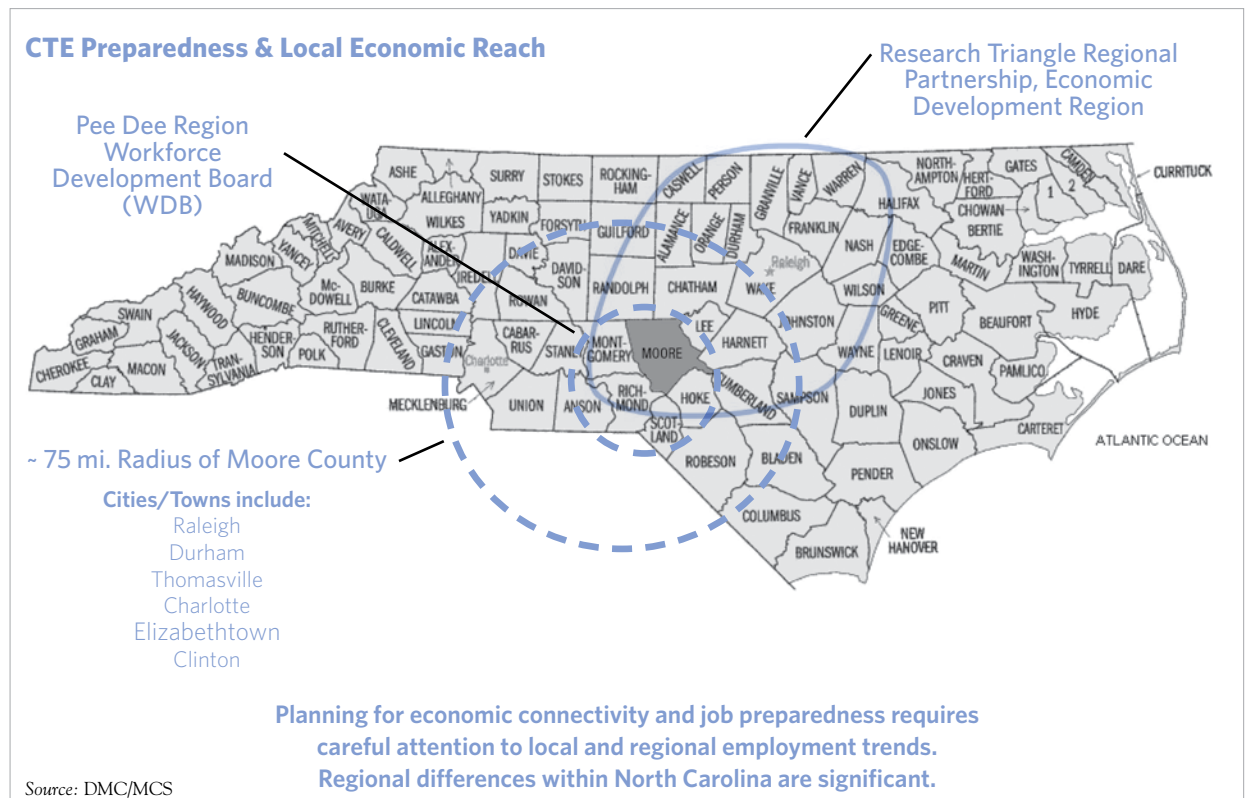


EXHIBIT 3

North Carolina Industry Projections, 2006-2016

Industries with Growing Employment	Annual Openings	Industries with Declining Employment	Annual Decline
Ambulatory Health Care Services	7,660	Furniture & Related Product Manufacturing	2,156
Administrative & Support Services	7,510	Textile Mills	2,129
Educational Services	7,450	Apparel Manufacturing	1,139
Food Services & Drinking Places	6,760	Telecommunications	356
Professional, Scientific Technical Services	5,240	Electrical Equipment, Appliance & Component Manufacturing	356
Specialty Trade Contractors	4,060	Beverage & Tobacco Product Manufacturing	342
Hospitals	3,380	Utilities	217
Nursing & Residential Care Facilities	2,290	Miscellaneous Store Retailers	206
General Merchandise Stores	1,530	Printing & Related Support Activities	201
Amusement, Gambling & Recreation Industries	1,000	Paper Manufacturing	160

Source: Employment Security Commission of North Carolina, Labor Market Information Division 2006-16 job growth and replacement (total openings) for occupational and industrial employment; DMC Analysis

biggest recent sources of new jobs are full-service restaurants, landscaping, real estate brokerage, and commercial banking. However, looking forward, state employment forecasting identifies areas such as human services and health sciences as significant drivers of future jobs growth. Statewide expectations of job growth are shown in Exhibit 3. Ultimately, CTE planning should take as much forward-looking data into account as possible.

DMC assisted the MCS team with a thorough analysis of Moore County and North Carolina employment trends by analyzing employment data by State, County, Workforce Development Board Region (WDB), and Economic Development Region. Each is notably different in its economic and employment profiles. DMC analysis looks beyond Moore County to address workforce forecasts at both the state and local levels. For all of the geographic areas considered, anticipated job growth (both in terms of percentage growth and total jobs created) contrasts starkly with Moore's historical employment trends. Given the CTE focus, it was important to constrain the analysis

of employment opportunities to those positions requiring education levels of an associate's degree or lower in order to tailor the data most appropriately to CTE participants. For the Pee Dee WDB area, career

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clusters that appear particularly attractive for future jobs growth include: 1) Human Services, Hospitality, and Tourism, 2) Health Sciences, and 3) Business Management and Administration. Less attractive were career areas such as Manufacturing, which were forecasted to experience negative growth. However, MCS's CTE enrollment trends were mismatched to these opportunity areas in several key areas. Relative to the job prospects, Moore's students were "under-participating" in areas like Human Services and Business ▷

Management and were “over-participating” in areas such as Information Technology.

Interestingly, this local dynamic has been the focus of some enlightening research recently. In May 2011, NPR’s “Planet Money” and *Wired Magazine* released a joint study on the future of jobs growth. Titled *Special Report: The Future of Work*, the report focuses on exactly how and through what types of jobs the country will rebound from the ongoing economic difficulties and jobs crisis. The quick take is that the dynamic is inherently local, with pockets of innovation fueling

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local growth and specialization. Further, the industries may not all be new. School districts are well advised to consider these trends — as Moore County did — to enable more strategic investments of time and resources in aligning with local economic trends.

How Can Districts Align Better with Local Trends?

Two main strategies exist to help districts improve alignment with local job market. First, CTE program offerings should target local trends. Second, tighter relationships with major local employers can help improve the connection between training and employment. Partnerships and advisory councils are both terrific opportunities to engage major employers in assisting districts to improve CTE offerings.

As mentioned above, the team’s findings showed that MCS’s CTE offerings and student demand may be mismatched versus the corresponding employment trends, depending on the geographic focus under consideration. What can the district do about the

mismatch? First, the district must inquire whether an adjustment is needed to the courses offered. However, adjusting course offerings is only one half of the solution. Equally important is for districts to consider how to manage the course selection process that students engage in. How well articulated are the job prospects in a given field? How is the career field “marketed” to students? Is it mostly word-of-mouth, or is the district engaged in more intentional activities to make student choices more informed? Moore County is considering the role of the guidance counselor in these decisions, and is making efforts to train guidance staff accordingly. For example, MCS course participation in the Human Services area is relatively small and shrinking, whereas the job market is large and growing. The district has an opportunity to close this gap both by making sure the course offerings are appropriate, and also by communicating the job opportunities appropriately to students.

As MCS evaluates specific courses in light of these findings, the district is also thinking critically about whether MCS or a partner is the best provider of specific course offerings. Does the district really need to do everything itself? For certain areas of concentration or a new subject area, a partnership may be the best pathway to a quality and cost-effective offering. An example of this might be the Law, Public Safety, Corrections, and Security career cluster, which is not currently supported by North Carolina but is forecasted to have significant growth in employment. While it may not be appropriate for MCS to pursue related course offerings directly, partnerships with other providers could help Moore students access these career opportunities more successfully. MCS is exploring deeper partnerships with Sandhills Community College, which has a range of potentially complementary course offerings and services to provide to the district.

Employer Partnerships: A Focus on Soft Skills

The second key approach — increasing the connectivity between the school district, its CTE operations, and key employers in the area — is also being pursued by the Moore County team. Considered a national best practice, a preferred way to incorporate employer input can be to create local councils made up of key employers and other “subject matter experts” who can help guide and adjust

CTE offerings to increase overall relevance and career preparation. For example, five of the top fifteen employers in Moore County are Health Services related, and could be asked to contribute more actively to a Health Service CTE Council. Aside from creating a more direct pathway for the exchange of information, these councils can help raise overall awareness and understanding of CTE offerings for students and their families.

Feedback from employers is important. In focus groups led by DMC during the planning process, key local employers shared their insights. Senior human resources leaders from the healthcare and hospitality industries — two of the area's largest sectors — agreed on several key considerations about CTE preparation. In reverse order of importance, three key factors were discussed. Third were job-specific technical skills — these could often be taught by the employer. Second were core academic skills, such as basic literacy and mathematics. First and most important were soft skills. Soft skills are critical for today's job market. Training from the school district would ideally include setting appropriate expectations about the workplace, such as showing up to work on time, how to dress, and how to interact with other people.

One employer detailed the challenge of finding customer service-oriented staff locally, leading to sourcing certain staff internationally. In fact, some employers were blunt in describing a misplaced emphasis on technical job aspects. However, employers appeared less willing to invest in training for soft skills and behavioral considerations. With significant media attention to these issues, often cited as being compounded by technology-supported social interactions, these factors appear to be national trends. District-employer partnerships can help solve these issues by setting expectations early and exposing students to the workplace earlier, more frequently, and for longer periods. Employers' priorities should be reflected in ongoing development and revision of CTE offerings. This can be achieved by frequent exchange of ideas and feedback directly with local employers through a local advisory council.

Ongoing Management of CTE in the Moore County Schools

The activities being pursued by Dr. Purser and her leadership team are anticipated to bring significant

increased value to CTE participants in Moore County. However, sufficient leadership and managerial attention is required to make these ideas a sustained reality. Recent reductions in central office staffing, as well as time burdens on counselors, mean that CTE administration is being stretched thin. MCS is considering an organizational structure and budget that could support additional resources to contribute to the following key areas:

- Ongoing data analysis and improved decision-making from course performance data, regional economic and employment data, and placement data from MCS graduates.
- Improved communications to raise awareness of career trajectories and employment opportunities for students, their families, and their guidance counselors.
- Ongoing management of, and communications with, local CTE councils.

A more data-driven, ongoing management process, through which economic and local employment could be more regularly analyzed in conjunction with district success, will be a powerful way to serve both students and employers more effectively.

Looking Forward

Moore County Schools recognized an opportunity to restructure its CTE offerings and management for greater overall impact without necessarily investing greater financial resources. As Dr. Purser notes, a lot remains to be done, but a strategic roadmap has been developed that will allow the district and employers to pursue greater success for the students and employers alike. Dr. Purser, her leadership team, and school board should all be highly commended for their deep commitment to and passion about the district's CTE program and the desire to strengthen educational offerings for all students.



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