rational e

Rockingham County is faced with daunting economic challenges. The exodus of its textile manufacturing base has not only left the county in search of new employment opportunities but has also left the county in search of a new identity. The types of relatively low skilled work that afforded our students' parents and grandparents with a family-sustaining wage have all but disappeared. Hence, there exists much uncertainty as to what will emerge as the new economic driver within the county. We believe that Rockingham County Schools, in collaboration



Spray Cotton Mill Eden, NC

with Rockingham Community College (RCC) along with business and community leaders, have to play a leadership role in addressing what we perceive to be a growing gap between the world of education and the world of work. If we are to improve the economic condition of our community, we must work in a consorted effort to close the gap between the **technical skills** that our citizens currently possess and those skills that are required for available careers. We must develop the types of **career skills** within our young people that are essential to success in the workforce, and we have to work together to develop the kind of **thinking skills** that will not only afford our students success within the current job market but will also grant them the capacity to adapt to the demands of such a rapidly changing economy. Our students will undoubtably be confronted with perplexing problems and unprecedented challenges within their lifetime. If we are to meet such challenges, then we are going to need the contributions of all of our young people.

If we are to garner the contributions of all of our young people, then we need to create a culture within Rockingham County where "connecting our students talents and interests with high wage and high demand careers," is a fundamental goal of our educational system. The most promising means of accomplishing this mission is to develop a comprehensive "pathway system." A pathway system is much more than a collection of outlined pathway programs. According to Meeder a comprehensive pathway system "is the coordinated interaction of key components- career development, pathway programs, dynamic teaching and learning, employer and community engagement, and cross-sector partnerships." (Meeder, 2016 p. 87).

In view of Meeder's definition of a pathway system, several gaps within Rockingham County Schools' approach to educating our young people became apparent. While the team charged with developing our district's pathway programs (RockATOP) is successful in their mission, there has yet to emerge a catalyst that would energize and compliment the programs. The pathway programs; therefore, are in danger of becoming one of many, many "disconnected improvements" that exist in public education. Disconnected improvements are well intended strategies for addressing challenges, but by and large exist in a vacuum apart from a coordinated effort to make meaningful change.

The good news is that a group of community leaders within Rockingham County have already acknowledged this problem of disconnected improvements. The group that became known as "Reset Rockingham" was formed in August of 2016. The group's mission is to coordinate the efforts of all stakeholders within the county behind the urgency of creating a workforce necessary to meet the economic needs of the county and its citizens. Reset Rockingham would fulfill the role of what Meeder considers the "pathway system leadership group." Antoine Agtmael and Fred Bakker (2016), authors of "The Smartest Places on Earth" label such a group as "connectors." This group of "catalysts" in their estimation is a "group with vision, relationships, and energy that is largely responsible for establishing and building the ecosystem (pathway system) (p. 26).

While we are building a pathway system at a leadership and strategic level, we have identified the need for a "connector" on a operational level. We need a person "at ground level" that is responsible for bringing all integral school, business, and college personnel together to fill several of the gaps that exist within our Pathway System. This person's primary purpose will be to connect relevant stakeholders in an effort to have rising 9th grade students able to make an informed decision regarding a career pathway; decisions that will manifest themselves in the application to one of our career academies or the creation of a 4-year plan that is driven by their career interest. This individual will connect 12th grade students with RCC staff to increase the number of students that enroll in RCC during and immediately after high school- with a particular emphasis on engaging Reidsville High School students. Finally the connector will work to connect 12 grade students with apprenticeship opportunities in conjunction with RCC.

100% of the funds awarded from this grant will be used to hire a Career Development Coordinator who will focus on two crucial transition periods: The transition from middle school to high school and the transition from high school to our local community college. For the purposes of this grant application the position will be known as a "Transitions Career Development Coordinator" (TCDC). The securing of a person who would specifically be responsible for streamlining middle grade efforts to support the pathway programs that exists at our high schools and to streamline the process of our student's transition from high school to post-secondary training and education; including internships and apprenticeships would represent for Rockingham County the most effective way to catalyze our pathway system.

The TCDC will be responsible for helping to remove the barriers that are preventing our students from entering the on-ramp toward a promising career pathway. Lack of readiness, a lack of self-awareness, and lack of knowledge and appreciation of the available academies and pathways represents a major impediment to our students success toward a career. We need to have our students ready to make an informed decision regarding the academies and pathway programs that are available to them as they transition into high school; and we need to make sure that they are well aware of the great opportunities that are available to them at RCC as they transition out of high school. We believe that these are two of the most critical transition periods in a young person's life and we need someone who is able to "connect" the stakeholders from these groups in order to allow access to pathways for all of our students. The TCDC will directly impact all rising 8th grade students (920) and will directly impact approximately 40% of high school seniors (those seniors who do not intend to attend a 4-year university.) If our pathway programs are to be successful, then they have to become rooted within the context of a vibrant and self-sustaining "pathway system." Such a system is needed to remove barriers that are preventing many of our most economically impacted students from accessing the "on ramp" to a promising career pathway.

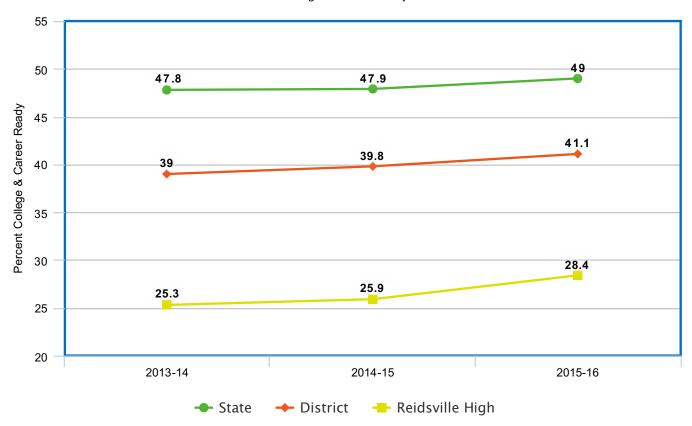
Increased Academic and Technical Readiness

One of the major barriers that we are finding that prevent our students from entering the on ramp of a promising career pathway is their lack of Academic and Technical readiness for the required course work. For instance, RCC staff identifies student inability to pass the required Anatomy and Physiology and the required Chemistry course as the primary barrier toward entry into their Nursing Program. We have to find a way to address this barrier before it becomes insurmountable. That means building a pathway program that prepares students for the rigor as early as 8th grade.

We understand that rigor cannot be increased by wishing or legislating it to be so. Higher levels of rigor emerge when instruction that is relevant to the student and within the context of relationships that are meaningful to the student. In short; rigor follows relevant instruction and meaningful relationships. As a result, one of the major responsibilities of the Transitions Coordinator will be to help our 8th grade students determine their unique set of talents and interests and connect them with a career pathway. According to Meeder (2016), such integration of academic and the technical classes that are aligned with student career interest produces a level of relevance that has a track record of improved academic performance. It also produces meaningful relationships with peers and adults which also leads to increased performance.

Only about 40 percent of American high school graduates are academically ready to do college-level work, according to the SAT and ACT analysis.

Meeder, 2016 p. 47



meta-chart.com

Although there exist much work to accomplish across the county to ensure the readiness of our students for postsecondary work, the greatest opportunity for improvement exist at Reidsville High School. Reidsville High School has the highest percent of economically disadvantaged students within the county and also has the highest percent of racial diversity. It is the high school within the district that does not currently have a career academy. This will all change beginning during 2017-18 School Year. RHS will pilot a Creative Design and Arts Academy. Each student will enroll in a series of Design Classes. These classes will not only provide students with specific technical skills but will also provide them with a set of critical transferable skills such as CAD competency that are necessary not only for design oriented careers but also advanced manufacturing as cited in a recent study conducted by Winston Salem City Council (Lamback & Murphy, 2016). As Meeder points out, the era where an individual could rely on a specific set technical skills for life-time employment has come to an end. We believe that Computer Aided Design competency and the kind of thinking that is involved in such design work are skills that can be transferred to many career paths. Antoine Agtmael and Fred Bakker assert in their book "Smartest Places on Earth," The smartfactory of the future will be transformed with three key technologies: robotics, 3-D printing, and the Internet of Things. Next generation robotics- smart, versatile, mobile, and cheap- will make automation affordable to start-ups and smaller enterprises and will offer an unprecedented level of customization to customers and allowing unprecedented creativity" (page 43). As a result, we intend to use student interest in design and advanced technologies to develop such transferable skills.

Increased Self-Awareness

One of the tragedies of current education system is that we adhere to a very limited view of "academic success." The CTE programs of Rockingham County Schools are rooted in the idea that all of our students have talents and abilities that can lead to a fulfilling career. A central role of the TCDC will be to help our 8th grade students identify such talents/interests and help them to develop a 4-year plan based on such interest. We agree with Meeder's contention that "every youth, by grade eight, (should) develop and maintain a personalized Career and Education Plan, integrating career development with planning for high school course taking, post-secondary education, and other forms of training" (Meeder, 2016 p. 168).

We have begun such a process on a small scale. Reidsville Middle School (RMS) is the sole feeder school for Reidsville High School. RMS has a Economically Disadvantaged rate of over 75%. The Achievement gap of the students that enter RHS as depicted above underscores the urgency of finding a more effective way of reaching these students. Reidsville Middle School is already preparing students for entry into the Academy. An interest assessment was given to all RMS 7th grade students in June of 2016. The results of the assessment were reviewed by the principal, counselor, and CTE director. A total of 25 students were selected based on their interest in the Arts as indicated on the interest assessment. 96% of the students that were selected performed below grade level on their 6th Grade EOG test. These students are set to move as a cohort group into our Creative Design and Arts Academy and will complete a CAD pathway.

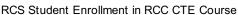
"Our schools are filled with many brilliant kids who think that they are not those things that schools have traditionally valued are not the things that they are good at."

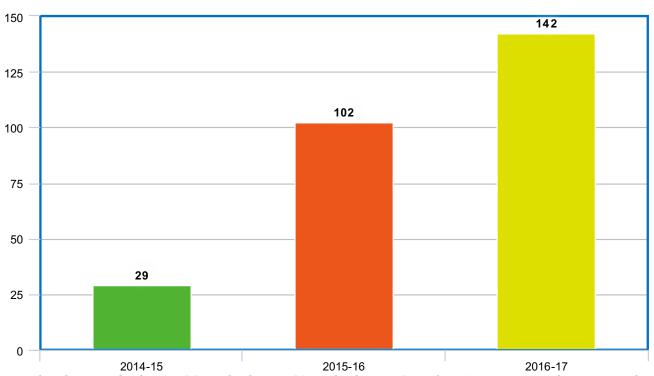
Sir Ken Robinson, 2001

Access to industry standard CAD programs plus output technology accessibility will allow these students the ability to habitually engage in the full range of the design process from the conception of an idea to the modeling of the idea in CAD programs to the actually creation of the product utilizing advanced technologies such as large format and 3-D printers. As mentioned, these skills and the ways of thinking that are developed though such instruction would be transferable to any number of career paths. Further, a large group of our students are expressing a interest in CAD. This number is represented in the graph on page 5. Interest in Adobe Visual and Video design by and large accounts for the increase in T&I enrollment.

Increased Career Awareness

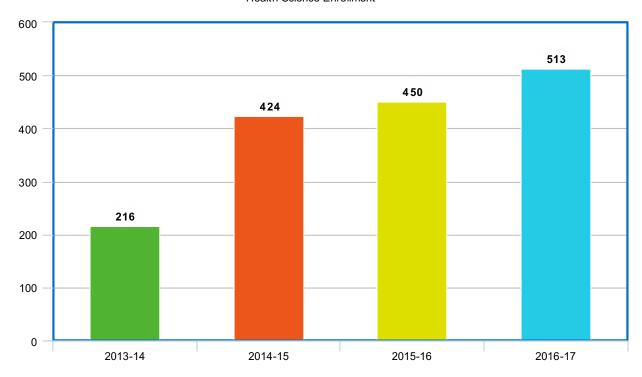
It has become very clear that our community suffers from a lack of appreciation of the excellent opportunities that exist for our young people within our own backyard. The new leadership at RCC is making a great effort to engage our high school students. RCC and RCS staff realize that we are confronted with a culture that views a Community College undesirable. RockATOP has already begun the inclusion of RCC classes in each pathway program, and has outlined the foundational high school courses that will prepare our students for such courses. As depicted in the graph below, we have also seen a tremendous increase in the numbers of students who enroll in a CTE class at RCC. However, we have yet to transition enough of our students into a pathway as they enter the 9th grade. We will need a person who is dedicated to helping our teachers, counselors and business leaders expose our 8th grade students to the broad array of career opportunities



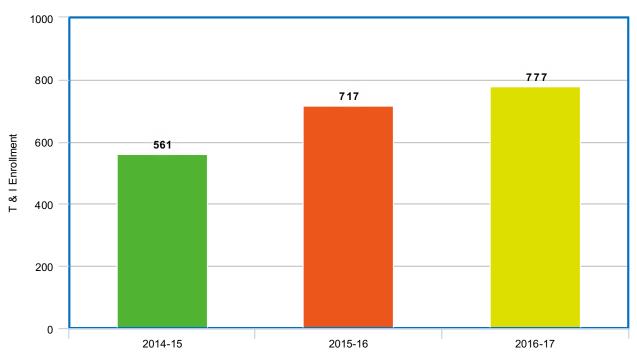


Reset Rockingham Leadership * RCC Leadership * RCS Leadership * NC Works * Economic Development Leadership

Health Science Enrollment







partners and programs

Rockinhgham County exemplifies Meeder's notion that "America has an amazing wealth of creativity, energy, and goodwill among its people, its schools and colleges, its businesses, and its social, religious and cultural institutions. We have a deep tradition of people rolling up their sleeves, taking responsibility, and getting to the work at hand" (Meeder, 2016 p. 21). The Creative Design and Arts Academy Team as listed on page 7, consists of a large number of school, college, business and community representatives that developed the structure of the CDAA Academy. Also the RCC/RCS Team, also listed on page 7, consists of a large number of RCS and RCC administrators, counselors and teachers seek to remove any barriers that exist between RCC and RCS. Rockingham County is blessed with many individuals and groups who want to contribute to the economic wellbeing of our community. Reset Rockingham emerged in 2016 as a group who seeks to coordinate and galvanize all such efforts to improve the future prospects of our County.

Reset Rockingham is a grass roots community effort to improve the economic conditions of Rockingham County. The group includes leadership from the Northwest Regional Work Force Development Board, the Rockingham County Education Foundation, the Economic Development Boards of our county and municipalities, Rockingham Community College, Goodwill Industries of Rockingham County and Rockingham County Schools along with contribution from more than 30 businesses within the county.

Reset Rockingham was established as a result of community/business concern over the caliber of the existing workforce in the county. The motivation to "reset" Rockingham was provided by the expression of a growing sentiment that the county's workforce lacked the basic academic skill, relevant technical skill, critical soft skills and meaningful work-related experience necessary to meet the demands of a 21st Century economy. The small group that initiated the effort believed that we could not wait for the answer to these vexing problems to emerge from the state or federal government. We insisted that it is up to the citizens of Rockingham County to solve these problems. Our mission is to develop a work force that is the envy of the state; create career opportunities for all and to provide a reason for businesses to come to our county and a reason for our young people to remain. Pictured below is Mr. Will Collins, Assistant Director of Work Force Solutions for the NC Department of Commerce addressing a group of business and community leaders at a Reset Rockingham function.

The Reset group believes that enough talent and interest exists to meet the economic challenges of our county. Rockingham County is fortunate to have many stakeholders who are interested in improving the economic conditions of our county. Reset Rockingham hopes to serve as a organizing body that can coordinate and galvanize such disconnected improvements in a consolidated effort to improve economy.



Reset Rockingham Event, October 2016



RCS & RCC Staff Presentation at 2015 National Pathways Conf. in Dallas, TX



Middle Creek Digital Academy Visit



NC School of the Arts Visit

Team that contributed to the CAD pathway:

Jamie Hunt Ann Mitchell Yolanda Stubblefield Christy Barham Sharon Fikes Tom Murphy Janet King Iodi Chester Matthew Rice Teresa Phillips Russell Vernon Pat Harden Ken Scott Marilyn Payne Demetrius Miller Travis Pike Bret Hart Portia Parris

Richard McGoogan Tara Beal Iason Dalton -

Ray Martin

Marilyn Payne

Debbie Moore

Ashley Doom

Wentworth, Assistant Principal Principal, RHS

CDC

Instructional Technology Lead Media Specialist/Maker Space

Theater Arts IB Coordinator Visual Arts Teacher Chorus Teacher

Director of Arts Council

Principal, Huntsville Elementary

RCC Art Instructor CTE Director

Rockingham Education Foundation

RHS, Assistant Principal RHS, Band Director Art Teacher LSE/ Artist

Arts Council

RCC Fine Arts Coordinator

Rockingham County Ed. Foundation

Fine Arts Festival Director Teacher Assistant/ Artist

Principal, RMS

Visual Math Teacher RMS Paceco Design Firm

RCC & RCS Collaboration Team

Lori Murphy Dept. Chair of Mathematics, RCC Celeste Allis Dean of Arts & Science, RCC Chandra Caple Director of Education Partners, RCC Charles Perkins Assistant Superintendent, RCS Christy Barham Instructional Tech. Coordinator, RCS Cindy Corcoran Assistant Superintendent, RCS Derick Satterfield Dir. of Enrollment, RCC Dean of Health & Public Service, RCC Dr. Kim Clark Dr. Mark O. Kinlaw President, RCC Director of Secondary Education, RCS **Greggory Slate** Jennifer Lester CTE Director, RCC Joy Toms Counselor, Morehead High School Ken Scott CTE Director, RCS

Kimberly Money Gear Up Coordinator, RCS
Laura Coffee Dean of Workforce Development, RCC
Louis McIntyre Title III Project Director, RCC

Shannon Hazelwood Counselor, RCHS

Sheila Regan Tim Parrish

Gina Byrd

Vice President of Academic Affairs, RCC

Dept. Chair of English, RCC

Admin. Assistant to Vice President, RCC



Nursing Fundamentals Students at Reidsville Chamber Business Showcase





Reset Rockingham Leadership Team

Ken Scott
Shawn Gowman
Dawn Charaba
Laura Coffee

CTE Director, RCS
Economic Development
Rockingham Ed. Foundation
Workforce Development Dean

Soft Skills Work Group

Brannon Russell, Ruger

Heather Adams Partnership for Children

Mike Dougherty, Eden Economic Development

Steve Scott, Tri-State Steel

Holly Williamson, EC Administrator, RCS

Amy Smith, Counselor, RCS
Cecil Kemp, Principal, RCS
Portia Parris, Reidsville YMCA
Ken Scott, CTE Director, RCS
Sharon Galloway HRD Coordinator, RCC

Communications Work Group

Dawn Charaba Rockingham Ed. Foundation
Karen Hyler Public Information Officer, RCS
Cindy Corcoran Assistant Superintendent, RCS
Heather Adams Partnership for Children
Stokes Ann Hunt Annie Penn Hospital

Jamie Rorrer Economic Dev. Rockingham
Jeff Garstka Economic Dev. Reidsville
Jen Nixon Reidsville Area Foundation
Katrina White Health & Human Services

Mason Porter NC Works

Rodney Shotwell Superintendent, RCS

Workforce Placement Work Group

Shawn Gorman Economic Development

Mason Portor NC Works Chris Rivera NC Works

Jennifer Nixon Reidsville Area Foundation

Dylan Galloway NC Works

Jennifer Lester CTE Director, RCC

Work Based Experience Work Group

Laura Coffee, Dean Workforce Development

John DeLine, Beta Fuel Will Berry Berico Fuels

Jen Nixon Reidsville Area Foundation

Jennifer Lester CTE Director, RCC Fonna Terry, Workforce Development

Ken Scott CTE Director, RCS Joy Toms, Counselor, MHS **Reset Steering Committee**

Mark Kinlaw President, RCC Rodney Shotwell Superintendent, RCS

Jan Critz Economic Development, PTRC

Wendy Walker-Fox Workforce Dev Director
Debbie Tuggle Goodwill Industries
Caroline Brigmon NC Dept. of Commerce

Technical Skills Work Group (RockATop)

Rebecca Sutton Health Science Academy Student

Tora Simpson Annie Penn Hospital

Allyson Edwards Health Science Academy MHS

Chandra Caple Director, RCC Christie Henlsey CDC MHS

Debra Ziegler Williamsburg Elementary
Diane Sawyer Reidsville Chamber President

Eugene Russell Board of Trustees Morehead Hospital

Misty Willimas HMS, AP

Joy Toms Counselor, MHS

Kim Clark Dean of Allied Health, RCC

Mark Richardson County Commisioner

Phyllis Horton Nursing Department Chair, RCC

Alicia Parker Owner, Royalty Adult & Pediatric Care

Beth Smith IMC, RCS

Ken Scott CTE Director, RCS Jennifer Lester CTE Director, RCC

Basic Skills Work Group (TBD)



RockATOP Members

performance outcomes

Enrollment of RCS students in CTE classes at RCC while still in high school, along with enrollment of RCS students within a pathway are metrics by which we use to gauge our progress. The initial numbers are encouraging. We completed a Health Science Pathway during the 2016-17 School Year. However, an established pathway had already been in existence at one of our high school since the inception of the Health Science Academy at Morehead High School. The Academy has contributed to a more than 200% increase in the number of students district-wide that enrolled in a Health Science class since its inception four years ago as represented in the graph on page 5. RockATOP developed a Machining, Welding and Mechatronics pathways during the 2014-15 school year. We believe that this emphasis on connecting our students to benefits of these high wage and high demand careers played a significant role in the dramatic increase in the number of instances of high school students enrolling in a CTE class at RCC as represented in the graph on page 4. Since the inception of the pathways enrollment in CTE classes increased from 29 instances in 2014-15 to 142 instances in 2015-16- this equates to a more than 400% increase in CTE RCC classes taken by our students.

Even though we have already experienced incredible growth we will not be satisfied until we have connected all of our students talents and interests to a pathway leading to a high wage and high demand career. One of the starkest opportunities for improvement exists at Reidsville High School. While many students from our other three traditional high schools have taken advantage of the opportunities at RCC, Reidsville High School students have not. Reidsville High School is the only school that does not have an established career oriented academy. We are of course in the process of changing this reality. The presence of a staff member with the primary goal of placing our Reidsville area students on a career pathway as rising 9th graders and connecting students with Rockingham Community College as seniors will be necessary to improve this metric.

Work-Based Learning Opportunities

The Eden Chamber of Commerce along with the Reidsville Chamber of Commerce (in conjunction with RCC) grant our upper class students the opportunity to learn more about the career opportunities that exist within our county via their respective job expo events. The Reidsville Chamber makes a particular effort to plan the event with RCS and RCC so that students can gain the knowledge of the post-secondary training that is required for entry level positions within the businesses represented at the Reidsville Chamber event.

The internship experiences that we offer within RCS represent the major thrust of our work-based experience program. The number of students conducting internships has increased over the years. The greatest opportunity for improvement in our overall work-based program would be the inclusion of an active apprenticeship program. While internship experiences have increased during our era of Academies and Pathways, we have not taken advantage of our high school students taking advantage of apprenticeship experiences. This becomes particularly important to our students now that their community college tuition can be paid for them if they begin an apprenticeship program while in high school. RCS does not currently have a student that is engaged in a apprenticeship program. One of the Reset Rockingham Work Groups is already meeting in an effort to change this reality. The presences of a staff person who has the responsibility of securing apprenticeship opportunities for RCS students as one of his/her duties would help catalyze this effort.

Arcticulation Agreements

Most of our efforts within our pathway programs have been to encourage our students to take RCC classes while still in high school. However, we have included classes eligible for articulated credit within our pathway programs. A large group of RCC staff and RCS staff met on November 9, 2016 to revise our current plan. While consensus was formed regarding our articulation proposal, there remains work to do regarding the process by which RCC awards articulated credit for eligible students. This constitutes a great opportunity for improvement between the two institutions. The TCDC would be involved in streamlining the articulation award process if we are awarded the funds.

Credential Attainment

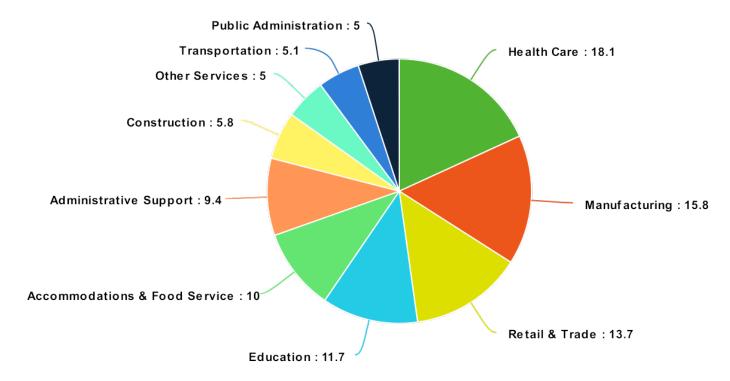
 Γ he vast majority of the credentials obtained by RCS students are MSITA credentials. These credentials, of course confirm the existence of a skill set that is applicable to virtually all careers. CNA credentials constitute our second most attained credential. The number RCS students obtaining their CNA credential increased 26% between the 2015-16 School year and the 2016-17 School year. We this expect this number to continue to increase as more students enroll within our Nursing Pathway. The CNA credential is often considered a first step in a precession of stackable credentials within Health Care. This is encouraging for our county given the perennial need of health care professionals within our county as indicated by the graph below. The outlook for the need of Health Care professional is also supported at the state level by the dominance of careers in health care within the "Star Jobs Report" (www.nccommerce.com/ lead/data-tools/star-jobs). Pictured to the right is Dalton McMichael Health Science Teacher, Ms. Donna Holder and her Nursing Fundamentals Students who all received their CNA credential this spring (one student not pictured).

An opportunity to greatly impact the number of students who obtain an industry recognized credential exists within the context of our Adobe classes. Enrollment within our Adobe classes continues



CNA Pinning Ceremony at DMHS

to grow. We intend to utilize the TCDC to help direct our "visual learners" and those who are interested in a career in design toward our Adobe classes and a CAD pathway. PRC 014 funds will be used to establish our high schools as Adobe testing centers. Such an effort should diversify our credential offerings and should positively impact the number of students who obtain an industry recognized credential while in high school. Such skills would also be transferable to many of the advanced manufacturing jobs that are also in high demand within our county as indicated in the



Top Industries in Rockingham County, Source: Rockingham County Economic Development & Tourism

program enhancements

100% of the grant award will be used for the salary and benefits of a full-time TCDC. The TCDC will develop a plan or work that will encompass the initiatives explained throughout this document. The TCDC will focus on transitioning 8th grade students from middle school and into high school and transitioning 12th grade students from high school and into the world of work (including internships & apprenticeship opportunities).

Outcomes-

- 1. All 8th grade students will complete an interest inventory. Other Career Diagnostic Assessments might include: a career cluster survey, basic skills survey, transferable skills check list and a work values sorter.
- 2. All 8th grade students will complete a 4-year plan for high school based on their career and/or post secondary interests.
- 3. All 8th grade students will begin a CFNC account.
- 4. TCDC will actively participate with Rockingham Apprenticeship and Technical Opportunities Partnership (Rock-ATOP) to develop pathway programs.
- 5. TCDC will promote Career Pathways and our Career Academies at annual parent nights and student information sessions.
- 6. TCDC will seek the assistance of Local Chambers and Service Organizations to provide job shadowing opportunities for 8th grade students.
- 7. Credential Attainment at Reidsville High School will increase by at least 100% by the end of the 2019-20.
- 8. The number of high school students taking classes at RCC will continue to increase each year; At least 10 RHS students will be enrolled in a class at RCC during the 2017-18 school year with that number increasing by 25% each of the following two school years.
- 9. All RHS Seniors who have not committed to a 4-year college will participate in a **seminar with RCC** where they will have the opportunity to begin the application process. (This seminar may expand to the other high schools within the district during the 2017-18 school year).
- 10. TCDC will work along with Reset Rockingham work group to secure at least one **apprenticeship** opportunity for a RCS student each year.
- 11. Work along with RCC/RCS Collaboration Team to remove barriers that exist between the two institutions.

The production line paradigm that continues to persist within our education system is obviously failing. The system has become as obsolete as the crumbling factories that are sprinkled throughout our county that once flourished under the system. They are now monuments to the demise of that system. Our schools lie in the literal shadows of these vacant factories, yet our schools still adhere to the production line model as if we are still preparing young people for that kind of work. We need to change. We need to do it now. The position which this grant will make possible will constitute one more step toward the change that we would like to see.

"We have spent the entire 20th Century perfecting a 19th Century model of education."

Stephen Heppel

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