NORTH CAROLINA
DIGITAL LEARNING INITIATIVE

Insights from the Field
Case Study Series

*Powered by NCDPI and
Friday Institute at NC State University*

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FRIDAY INSTITUTE
FOR EDUCATIONAL INNOVATION

Public Schools of North Carolina
State Board of Education
Department of Public Instruction

NC STATE
UNIVERSITY

ABOUT THIS REPORT

The Friday Institute for Educational Innovation at NC State University's College of Education conducted site visits at four schools (Ed Tech High School, Washington High School, P.S. Jones Middle School, and John Small Elementary School) in Beaufort County, North Carolina. Beaufort County Schools (BCS) is a rural school district located in the southeastern part of the state with 14 schools and 6,673 students. Our team interviewed teachers, students, and administrators in Beaufort to learn how BCS are providing equitable learning opportunities for all students.

Thank you to the administrators, educators and students of Beaufort County Schools for contributing to this case study.

The mission of the **Friday Institute for Educational Innovation** at the NC State University College of Education is to advance education through innovation in teaching, learning, and leadership. The Friday Institute conducts research, develops educational resources, provides professional development programs for educators, advocates to improve teaching and learning, and helps inform policy-making. The Friday Institute is in the process of implementing recommendations from the North Carolina Digital Learning Plan, which includes a comprehensive asset and needs assessment of how schools and districts in the state can transition to digital learning to improve student outcomes. The plan includes an emphasis on human capacity, which builds upon the Friday Institute's extensive experience in providing and evaluating professional learning opportunities for state and district level leaders, principals, instructional coaches, and educators. http://fi.ncsu.edu/

The **North Carolina Department of Public Instruction (NCDPI)** is charged with implementing the state's public school laws, policies, and procedures governing pre-kindergarten through 12th grade public education. The elected State Superintendent of Public Instruction leads the Department and functions under the policy direction of the State Board of Education. http://www.ncpublicschools.org/

Access to Opportunities: A Student-Centered Approach

Insights From the Field – Beaufort County Schools

MARY ANN WOLF, GREG GARNER, AND RACHEL JONES   March 2019

ABOUT THIS PROJECT

The Friday Institute for Educational Innovation at NC State University's College of Education conducted site visits at four schools (Ed Tech High School, Washington High School, P.S. Jones Middle School, and John Small Elementary School) in Beaufort County, North Carolina. Beaufort County Schools (BCS) is a rural school district located in the southeastern part of the state with 14 schools and 6,673 students. Our team interviewed teachers, students, and administrators in Beaufort to learn how BCS are providing equitable learning opportunities for all students.

EQUITABLE LEARNING OPPORTUNITIES FOR ALL STUDENTS

Some districts view student-centered learning as an intervention or differentiation. They seek to utilize student-centered learning when a student is not successful in a traditional school or classroom environment. However, BCS does not see this only as a way to address deficits, but instead Beaufort is focused on creating new modes of student-centered learning for all K-12 students. This radical shift away from a more "traditional" method of education is grounded in equity. For BCS, equity isn't a buzzword or something optional; it is an imperative. Central to individualized student-centered learning is the conviction that learning is for *all* students. Beaufort seeks to provide unique pathways for students, creating a culture where students can pursue their own interests and learn in ways that meet their own needs.

For Ms. Padgett, it's personal. This is where she went to school and where her children are currently enrolled. When she thinks about the changes she's seen in Beaufort County, she smiles. She thinks about how the district is now using virtual academies to meet the needs of more learners and is partnering with homeschool and private school communities to provide part-time services. She recognizes that parents can choose where to send their children and she wants to make sure they *choose* BCS.
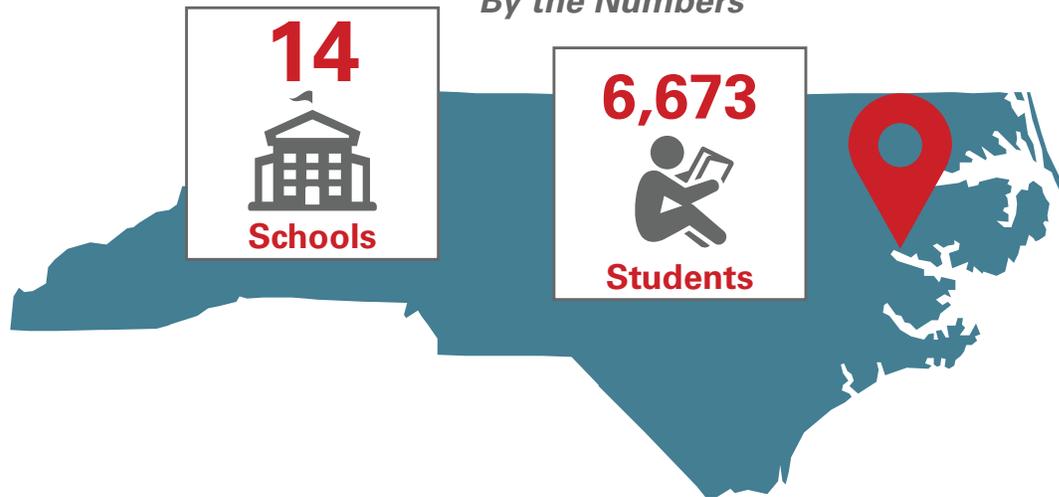
> At Ed Tech High School, students have the opportunity to learn in ways that meet their individual needs and goals. Students work with the latest classroom technology, learn in individualized and personalized pathways, and coordinate with the local community college system to establish their post-secondary plans. Students explore the solar system in virtual reality, program robots to follow designated paths and create new prototype designs to solve problems.

QUESTIONS TO CONSIDER:

- How do we support the individual needs of each student to identify and provide what they need to thrive in life?
- What opportunities are currently afforded to *some* of your students that could be expanded to *all* of your students?
- Who are the learners in your district? Students? Teachers? Parents?
- How are you creating opportunities for *all* of them?

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Beaufort County
By the Numbers

14
Schools

6,673
Students

STRATEGIC APPROACH

Based upon our interviews with administrators, teachers and students, several themes emerged supporting Beaufort's transition to a more student-centered approach to learning, ensuring equitable access to opportunities for all students.

Educators as Lead Learners

Cross-Curricular Collaboration

Leadership to Change Mindsets

Using Digital Tools & Resources

Community Engagement

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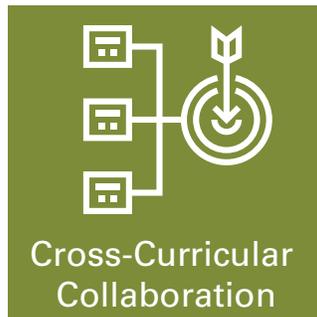
EDUCATORS AS LEAD LEARNERS

BCS is embracing the lead learner posture as a new role for their teachers. Lead learners recognize that the world tomorrow will not look like the world today, and that the lessons of today need to be more resilient and malleable. They also noted that staying "in front of" technology is likely impossible. The teachers in Beaufort County who have become a lead learner in their classrooms did not go to a specific training class or watch a series of videos; instead they began sharing their own experiences with students, while simultaneously learning with their students. Teachers embraced the opportunity to learn alongside their students. Often these lessons resulted in deeper discussions about the content. As a lead learner, teachers bring the whole of their expertise to each conversation, asking incisive questions and providing guidance along the way. When teachers become lead learners, it frees them to try new things in their classrooms. When administrators are lead learners, they can serve as more effective coaches in providing feedback to their staff. And when superintendents become lead learners The whole district might change.

Teacher Reflections

Mrs. Behar is the lead learner for her computer science class for 7th grade students. Utilizing code. org's free middle school computer science curriculum, she is learning right alongside her students, promoting the kinds of interpersonal skills that will help students master not just the content, but its application to the world of work. Her students have the opportunity to see her asking questions, facing challenges, and learning with them. As one student demonstrates the app he built last semester, Mrs. Behar reflects on the importance of teaching computer science. Coming from a business background as a lateral-entry teacher, she knows that her students are not only learning computer skills, but also critical life skills: communication, collaboration, teamwork and the ability to take your idea and turn it into something tangible.

Ms. Meall's digital art class rotates between drafting with iPad Pros and Apple Pencils, 3D modeling and printing, and Adobe Creative Suite work on iMacs at standing desks. This is her 7th year teaching and she finds herself learning new things every year. She has retooled her instructional approach to promote a more flexible learning environment, allowing students to choose what and how they like to work. She keeps them active: her standing desks are actually old art-room countertops that have been repurposed and outfitted with iMacs. She says this way of running her class frees her up to meet students where they are since she can work in small groups or even individually as students are each pursuing their own projects.

QUESTIONS TO CONSIDER:
- What does being the lead learner look like in your role?
- When was the last time you were genuinely curious about something? What was that like?
- How does the posture of being a lead learner support equitable access to learning opportunities?
- What is a small experiment you could try to begin supporting more lead learners in your district?

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CROSS-CURRICULAR COLLABORATION

When BCS decided to implement a STEM plan in their schools, it was fundamentally about creating a new culture of cross-curricular collaboration for teaching and learning. Instead of creating 'STEM Centers' or 'STEM classes,' they focused on how to incorporate science, technology, engineering, and math into more areas of the curriculum. In some cases, this led to new courses, in others it meant repurposing existing courses, and in other cases still, it meant examining existing curricula for opportunities to highlight these areas. For example, with this cross-curricular mindset, students in Ms. Whitehead's STEM class, were able to spend time on both the engineering and artistic side of their creations before sending them to be 3D printed. In Ms. Bryant's design class amidst a collection of popsicle sticks, hot glue, and a miter saw, students worked on their latest creations, popsicle stick huts that meet certain design specifications. Displayed in her classroom are previous projects such as DaVinci-inspired inventions. "I started learning about DaVinci and I got really excited," Ms. Bryant gushes. "The more interested I am, the more interested the kids are." It may seem like a straightforward makerspace where kids are able to create and build, but Ms. Bryant is quick to point out the purposeful pedagogy and cross-curricular supports she has intentionally woven in to lessons. "For our construction unit, we were heavy on math. It made me rethink assessment in the context of cross-curricular projects."
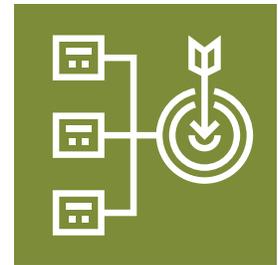
It has not always been this way. Ms. Petteway notes, "... we have a STEM plan now," but that was not true just three years prior to this. The instructional services team has worked tirelessly, often well outside of normal school hours, to develop more ways for teachers to get the resources and support they need to be successful. "It takes two to three years of consistency to see fruit," says Ms. Petteway.

QUESTIONS TO CONSIDER:
- What collaborations are possible in your district?
- How can your school implement cross-curricular projects to meet student learning needs?
- What natural collaborations are *already happening* and how can you find out?

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LEADERSHIP TO CHANGE MINDSETS

Leadership at the highest levels is essential for creating equitable opportunities for all students. At BCS, leadership starts at the top with Superintendent Dr. Phipps asking simple questions on how to serve more students in new ways. These questions generated a buzz of ideas from the leadership team. At Beaufort, the curriculum and instructional technology teams work closely together to develop new opportunities for students and create new pathways for professional learning for teachers. For example, BCS was the first district in eastern North Carolina to offer micro-credentials for teachers. These micro-credentials allow teachers to learn at their own pace, demonstrate mastery of new concepts through classroom implementation and receive strategic scaffolding based on their individual learning needs.
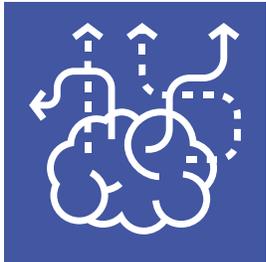
Dr. Phipps shared how important it is for leaders to model the kinds of practices they wish teachers to demonstrate. This has been a driving force for the high priority placed on differentiating teacher professional learning. Further, Dr. Phipps expects his leaders to be exemplars of technology use. This does not mean every principal is tech-savvy, rather that they are willing to model the lead learner mentality. "You might fail," says Dr. Phipps, "but learn from it." When asked about how to develop these kinds of mindsets, his eyes light up as he thinks about the possibilities for continuing professional growth. "Go to conferences. Look for things. Use social media. Everywhere I've been, I've learned something." With this approach, instead of mandating principals and teachers be technology experts or lead learners, Dr. Phipps encourages his staff to learn on their own and adopt these mindsets when they are ready.

> "
>
> I learn all the time with them. Everyday we come in and accidentally learn something. I'm not the one asking the questions.
>
> –Ms. Whitehead

QUESTIONS TO CONSIDER:
- What leaders in your district are already working towards providing equitable access to unique learning opportunities for all students?
- How will you tap into their passion and expertise?

USING DIGITAL TOOLS & RESOURCES

Throughout BCS, the district is rapidly increasing access to all kinds of technology from 3D printers to programmable robots to virtual reality systems. The introduction of new technology creates new points of connection, collaboration and creative outlets. Technology also offers opportunities to provide students with a variety of course offerings, such as audio engineering, to meet student interests and needs. However, technology itself does not transform learning; effective pedagogy is essential for student learning. Technology acts as an amplifier of strong teaching practices, allowing teachers to extend opportunity and access where it was not previously available.

As observed in classroom after classroom, teachers are experts at connecting with students and discovering ways to expand what's possible. Michael Swinson, principal of Washington High School, a traditional 9-12 campus with 982 students and 70 teachers shares the progress they have made in recent years, Mr. Swinson and his staff utilize 38 indicators of their school improvement plan to address the learning needs in their school and ensure that opportunities are provided for all students. These include virtual coding classes in partnership with the NC School of Science and Math, community design collaborations, drafting, 3D modeling, and digital art. "Teachers want to try these new ideas," says Principal Swinson, "we have people who are innovative and connected to the community… they want to take ideas and run!"

Student Perspectives

Gunner, a graduating senior, shares how digital art has changed his high school experience. He shares that school is a challenge; but through his digital art classes and the mentorship provided by teachers like Damon Walcott, he's been able to explore and expand his craft, earning multiple awards and invitations to galleries. The classes utilize some of the latest technology to put tools into the hands of learners to become creators. The class does not pre-identify which tools the students will use; instead, they focus on what students want to accomplish. The students and their teacher identify what kinds of stories they want to tell and what kind of message they have to share. In one instance, this led to a group of students using paint-covered Sphero robots to paint a massive canvas. This is something Gunner says would have taken him weeks or even months to finish by himself, but can now can be done in just a couple of days worth of planning and programming.

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While digital art classes may seem like the natural outcropping for students already interested in art, they also serve students like Isidro and Alaina who were not initially drawn to art, but have found a home in the studio. Isidro, a junior, brings his love of music to the video production class and is beginning to think about a career in audio engineering.

Alaina, a senior, decided to take video and broadcasting as an elective, but is finding that she really enjoys being able to have a new medium for her thoughts. "I've got an English brain," she says, "I look at things differently." Alaina wants to use her "English brain" to dive into the stories of others in pursuit of a psychology degree.

Adavion, a freshman at Ed Tech High School, begins listing off the skills he has acquired in class and how he wants to use them in the future. For example, he is working on robotics and coding, which he hopes to develop into a career in aerospace. "Earth is a cage," he says, describing his desire to experience the freedom of space, and he has already identified his next steps as he pursues more math classes to help him pursue his dreams. Quayshun, a senior, discovered a love of welding through Ed Tech's close relationship to the local community college. He hopes to further develop his welding skills and serve in the Armed Forces. He's also considering expanding his programming skills so that he can work on the advanced mechatronics of modern cars.

QUESTIONS TO CONSIDER:
- What technology tools are available in your district?
- How can technology tools and resources support equitable access to learning opportunities?
- What is a small experiment you could try to begin implementing technology tools in your district to support student-centered learning?

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COMMUNITY ENGAGEMENT

At its core, BCS is passionate about being part of the very fabric of the community. Dr. Phipps notes how many businesses and organizations to which he stays connected. "We have all kinds of needs. Who's in our community that can help?" It is in this spirit that Beaufort developed a wide array of partnerships. As a superintendent, Dr. Phipps attended community meetings and served on various advisory councils to continually advocate for the district.
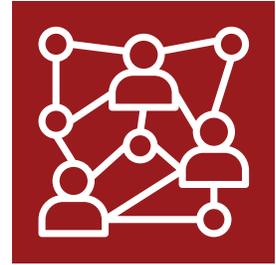
In 2017, Beaufort decided that every teacher in the county should have a class website. With limited time, capacity, and resources, the district determined that it would be a long, expensive solution to train all teachers how to create their own website. When a local organization heard about these challenges, they reached out to Beaufort and helped teachers create class websites. Currently, all teachers have a class website to serve as an instructional hub and parent portal for information on class events, assignments, and curricular themes.

Beaufort has another partnership with the Washington-Beaufort County Chamber of Commerce and their Bright Futures program. This program establishes a local council at each school comprised of parents, teachers, and community members to identify and meet the needs of students. For example, most schools have stocked pantries with basic food items as well as toiletries to help provide for students who may not have access to such items at home. "We had a student who was 17, living on her own and raising her younger brother, so they needed everything," says Ms. Padgett, "they needed a kitchen table, chairs, beds and mattresses. Bright Futures posts this information on Facebook and Instagram and has a drop-off point at the Chamber of Commerce, and within 24 hours all these needs were met by the community." This kind of community engagement takes high levels of trust and communication to identify the needs of students and then address them in generative, supportive ways.

More importantly, BCS does not see itself merely asking *for* help, it is often asking *to* help. Students from Ms. Bennett's class worked directly with community college instructors, students from Washington High School worked with a local manufacturing company on boat design and students from Ms. Bryant's 4th and 5th grade enrichment class hosted multiple events to engage parents and the community. And in Ms. Bryant's class, students are discovering their passion *by* serving their community. Ms. Bryant has also worked to get parents involved through their Duke Energy Science Night where students and parents worked together to design roller coasters, race magnetic cars, and build paper flying machines. "It's important to involve parents, bring them into the classroom." When you talk to any of the students in this class, they are able to clearly speak to you about what they are working on in a way that is straightforward and easy to understand. Dr. Phipps echoes and underscores the importance of clarity in your conversations. You have to "articulate in language others can understand. Avoid jargon," he says. When you are able to clearly and succinctly articulate your position to your potential partners with a direct ask or offer, you make it that much easier to engage more partners without making your partners feel like they are on a totally different wavelength from you. The Instructional Services team says this is exactly what they want to see: opportunities for every child at every grade level all the way through high school and into the community. "We're building a pipeline, listening to the businesses in our area," says Ms. Petteway.

QUESTIONS TO CONSIDER:
- What does your district have to offer in service to the local community?
- Who would benefit from collaborating with your students and teachers?
- How can you give the members of your community an easy way to say, "yes!"

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SUMMARY

In BCS, administrators, teachers and students work together to create new modes of student-centered learning for *all* K-12 students. Instead of focusing on intervention or differentiation strategies for *some* students; Beaufort's philosophy is founded in equity and believes that all students should have access to learning opportunities that meet their needs. This is evidenced at schools throughout the district where students engage with the latest classroom technology and learn via personalized pathways. With a strategic scaffolding approach, focused on teachers as lead learners; cross-curricular collaboration; leadership; technology; and community engagement, more students have access to student-centered learning opportunities. These efforts combine to create new outcomes for students that are aligned to each student's preferences, desires, and goals.

Editor's Note: Since the interviews and research were conducted for this case study, Superintendent Dr. Don Phipps has taken a position as a Superintendent of Caldwell County Schools.

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