U.S. Department of Education
2022 National Blue Ribbon Schools Program

[X] Public or [ ] Non-public

For Public Schools only: (Check all that apply) [ ] Title I [ ] Charter [ ] Magnet[ ] Choice

Name of Principal Mr Timothy Chadwick
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Weatherstone Elementary School
(As it should appear in the official records)

School Mailing Address 1000 Olde Weatherstone Way
(If address is P.O. Box, also include street address.)

City Cary State NC Zip Code+4 (9 digits total) 27513-3562

County Wake

Telephone (919) 380-6988 Fax (919) 704-2029
Web site/URL https://www.wcpss.net/weatherstonees E-mail tchadwick@wcpss.net

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

[Signature]
Date____________________________

Name of Superintendent* Ms. Cathy Moore E-mail cqmoore@wcpss.net
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name Wake County School District Tel. (919) 431-7400
I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

[Signature]
Date____________________________

Name of School Board President/Chairperson Ms. Lindsay Mahaffey
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)
I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

[Signature]
Date____________________________

The original signed cover sheet only should be converted to a PDF file and uploaded via the online portal.

*Non-public Schools: If the information requested is not applicable, leave blank.
PART I – ELIGIBILITY CERTIFICATION

The signatures on the first page of this application (cover page) certify that each of the statements below, concerning the school’s eligibility and compliance with U.S. Department of Education and National Blue Ribbon Schools requirements, are true and correct.

1. All nominated public schools must meet the state’s performance targets in reading (or English language arts) and mathematics and other academic indicators (i.e., attendance rate and graduation rate), for the all students group, including having participation rates of at least 95 percent using the most recent accountability results available for nomination.

2. To meet final eligibility, all nominated public schools must be certified by states prior to September 2021 in order to meet all eligibility requirements. Any status appeals must be resolved at least two weeks before the awards ceremony for the school to receive the award.

3. The school configuration must include one or more of grades K-12. Schools located on the same campus (physical location and mailing address) must apply as an entire school (i.e. K-8; 6-12; K-12 school). Two (or more) schools located on separate campuses, must apply individually even if they have the same principal. A single school located on multiple campuses with one principal must apply as an entire school.

4. The school has been in existence for five full years, that is, from at least September 2016 and each tested grade must have been part of the school for the past three years.

5. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2017, 2018, 2019, 2020 or 2021.

6. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. If irregularities are later discovered and proven by the state, the U.S. Department of Education reserves the right to disqualify a school’s application and/or rescind a school’s award.

7. The nominated school has not been identified by the state as “persistently dangerous” within the last two years.

8. The nominated school or district is not refusing Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.

9. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.

10. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district, as a whole, has violated one or more of the civil rights statutes or the Constitution’s equal protection clause.

11. The nominated school has, or is subject to, a nondiscrimination policy (provide either a link to the policy or submit a text of the policy), is committed to equal opportunity for all students and all staff consistent with applicable law and does not have any outstanding findings of unlawful discrimination. The U.S. Department of Education reserves the right to disqualify a school’s nomination and/or rescind a school’s award if unlawful discrimination is later discovered.
12. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

The U.S. Department of Education reserves the right to disqualify a school’s nomination and/or rescind a school’s award if one of these eligibility requirements is later discovered to have not been met or otherwise been violated.
PART II - DEMOGRAPHIC DATA

Data should be provided for the current school year (2021-2022) unless otherwise stated.

DISTRICT (Question 1 is not applicable to non-public schools. For charter schools: If a charter school is part of the public school system, information should be provided for the public school district. If a charter school is considered its own district or part of a charter district, the information provided should reflect that.)

1. Number of schools in the district (per district designation):
   - 119 Elementary schools (includes K-8)
   - 39 Middle/Junior high schools
   - 35 High schools
   - 0 K-12 schools
   **193** TOTAL

SCHOOL (To be completed by all schools. **Only include demographic data for the nominated school, not for the district.**)

2. Category that best describes the area where the school is located. If unsure, refer to NCES database for correct category: [https://nces.ed.gov/ccd/schoolsearch/](https://nces.ed.gov/ccd/schoolsearch/) (Find your school and check “Locale”)
   - [ ] Urban (city or town)
   - [X] Suburban
   - [ ] Rural

3. Number of students in the school as of October 1, 2021 enrolled at each grade level or its equivalent at the school. Include all students enrolled, in-person, participating in a hybrid model, or online only. If online schooling or other COVID-19 school issues make this difficult to obtain, provide the most accurate and up-to-date information available:

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Males</th>
<th># of Females</th>
<th>Grade Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreK</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>K</td>
<td>65</td>
<td>77</td>
<td>142</td>
</tr>
<tr>
<td>1</td>
<td>47</td>
<td>57</td>
<td>104</td>
</tr>
<tr>
<td>2</td>
<td>58</td>
<td>51</td>
<td>109</td>
</tr>
<tr>
<td>3</td>
<td>59</td>
<td>64</td>
<td>123</td>
</tr>
<tr>
<td>4</td>
<td>64</td>
<td>60</td>
<td>124</td>
</tr>
<tr>
<td>5</td>
<td>77</td>
<td>75</td>
<td>152</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12 or higher</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Students</td>
<td>373</td>
<td>386</td>
<td>759</td>
</tr>
</tbody>
</table>

*Schools that house PreK programs should count preschool students **only** if the school administration is responsible for the program.
4. Racial/ethnic composition of the school (if unknown, estimate):

- 0 % American Indian or Alaska Native
- 21 % Asian
- 10 % Black or African American
- 25 % Hispanic or Latino
- 0 % Native Hawaiian or Other Pacific Islander
- 39 % White
- 5 % Two or more races

100 % Total

(Only these seven standard categories should be used to report the racial/ethnic composition of your school. The Final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic Data to the U.S. Department of Education published in the October 19, 2007 Federal Register provides definitions for each of the seven categories.)

5. Student turnover, or mobility rate, during the 2020 - 2021 school year: 12%

If the mobility rate is above 15%, please explain:

This rate should be calculated using the grid below. The answer to (6) is the mobility rate.

<table>
<thead>
<tr>
<th>Steps For Determining Mobility Rate</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Number of students who transferred to the school after October 1, 2020 until the end of the 2020-2021 school year</td>
<td>47</td>
</tr>
<tr>
<td>(2) Number of students who transferred from the school after October 1, 2020 until the end of the 2020-2021 school year</td>
<td>44</td>
</tr>
<tr>
<td>(3) Total of all transferred students [sum of rows (1) and (2)]</td>
<td>91</td>
</tr>
<tr>
<td>(4) Total number of students in the school as of October 1, 2020</td>
<td>778</td>
</tr>
<tr>
<td>(5) Total transferred students in row (3) divided by total students in row (4)</td>
<td>0.12</td>
</tr>
<tr>
<td>(6) Amount in row (5) multiplied by 100</td>
<td>12</td>
</tr>
</tbody>
</table>

6. Specify each non-English language represented in the school (separate languages by commas):

Afrikaans, Amharic/Ethiopian, Arabic/Egyptian/GebaneseSytian, Bengali/Bangla, Cambodian/Khmer, Chinese, Chinese(Mandarin), Farsi/Persian/Dari, French, Gujarati/Gujarathi, Hindi/Indian/Urdu, Italian, Japanese, Kannada, Korean, Malayalam, Mam, Marathi, Nepali, Oriya, Polish, Portuguese, Romanian, Russian, Spanish, Tagalog/Filipino, Tamil, Telugu, Turkish, Ukrainian

English Language Learners (ELL) in the school: 19 %

146 Total number ELL

7. Students eligible for free/reduced-priced meals: 16 %

Total number students who qualify: 124
8. Students receiving special education services with an IEP or 504:  63 Total number of students served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional conditions. All students receiving special education services with an IEP or 504 should be reflected in the table below. It is possible that students may be classified in more than one condition.

- Autism: 0
- Deafness: 0
- Deaf-Blindness: 0
- Developmental Delay: 13
- Emotional Disturbance: 1
- Hearing Impairment: 1
- Intellectual Disability: 2
- Multiple Disabilities: 0
- Orthopedic Impairment: 0
- Other Health Impaired: 18
- Specific Learning Disability: 13
- Speech or Language Impairment: 5
- Traumatic Brain Injury: 1
- Visual Impairment Including Blindness: 0

9. Number of years the principal has been in her/his position at this school: 9

10. Use Full-Time Equivalents (FTEs), rounded to the nearest whole numeral, to indicate the number of school staff in each of the categories below. If your current staffing structure has shifted due to COVID-19 impacts and you are uncertain or unable to determine FTEs, provide an estimate.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>2</td>
</tr>
<tr>
<td>Classroom teachers, including those teaching high school specialty subjects, e.g., third grade teacher, history teacher, algebra teacher.</td>
<td>51</td>
</tr>
<tr>
<td>Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher etc.</td>
<td>8</td>
</tr>
<tr>
<td>Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.</td>
<td>18</td>
</tr>
<tr>
<td>Student support personnel e.g., school counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.</td>
<td>4</td>
</tr>
</tbody>
</table>

11. Average student-classroom teacher ratio, that is, the number of students in the school divided by the FTE of classroom teachers, e.g., 22:1  15:1
12. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily student attendance</td>
<td>96%</td>
<td>97%</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
</tr>
<tr>
<td>High school graduation rate</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

13. **For high schools only, that is, schools ending in grade 12 or higher.**

Show percentages to indicate the post-secondary status of students who graduated in Spring 2021.

<table>
<thead>
<tr>
<th>Post-Secondary Status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduating class size</td>
<td>0</td>
</tr>
<tr>
<td>Enrolled in a 4-year college or university</td>
<td>0%</td>
</tr>
<tr>
<td>Enrolled in a community college</td>
<td>0%</td>
</tr>
<tr>
<td>Enrolled in career/technical training program</td>
<td>0%</td>
</tr>
<tr>
<td>Found employment</td>
<td>0%</td>
</tr>
<tr>
<td>Joined the military or other public service</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

14. Indicate whether your school has previously received a National Blue Ribbon Schools award.

Yes _  No X

If yes, select the year in which your school received the award.

15. In a couple of sentences, provide the school’s mission or vision statement.

The Weatherstone Elementary School family will utilize STEM strategies and philosophies, enhanced by professional learning teams, to promote student growth and to demonstrate responsible citizenship. Vision: Weatherstone Elementary students are encouraged and empowered by distinguished teachers who facilitate a relevant and rigorous curriculum to ensure student learning that prepares them for their future in a global society.

16. Provide a URL link to or text of the school’s nondiscrimination policy.

In compliance with federal law, Wake County Public School System and Weatherstone Elementary School administers all education programs, employment activities and admissions without discrimination against any person on the basis of gender, race, color, religion, national origin, age or disability.

17. **For public schools only,** if the school is a magnet, charter, or choice school, explain how students are chosen to attend.
PART III – SCHOOL OVERVIEW

Weatherstone Elementary School (WES) is located in Cary, North Carolina and has a student population of 759 currently in the 2021-22 school year. One of the strengths is the school’s diversity, which is reflected in the demographic data. The staff value that the students have a real-world experience at Weatherstone, as they interact with individuals from many different cultures, ethnicities, languages, religions, and backgrounds.

Weatherstone is a family and community-oriented school, with close partnerships with the PTA (Parent Teacher Association) and local businesses. The PTA financially supports the school by purchasing items like TVs for classrooms, play shades for outdoor learning spaces, refillable water bottle stations, and a grant for each teacher to use for their classroom yearly. The PTA also helps facilitate classroom learning experiences and school-wide events. Prior to Covid, each year they helped organize a Multicultural Festival to highlight the different cultures represented at Weatherstone, the STEM (Science, Technology, Engineering & Math) Expo to display student STEM practices and projects, Student Reflections to honor student art and literacy, Community Helper Day to bring local first responders for the Kindergarten and First Grade, and other events.

As a North Carolina STEM School of Distinction at the Model Level, STEM is a defining quality and philosophy throughout our building. The school incorporates STEM practices into every classroom by having students engage in Project Based Learning (PBL) and using the Engineering Design Process. Weatherstone has two specials that are specifically designed with a STEM focus: Readers’ Theater and Design & Innovation. The staff applied for and received a grant in 2017 to transform the media center into a STEM learning space by adding flexible seating, a lego wall, and a green screen for the student news crew team. Also through this grant, staff purchased flexible seating options for all classrooms throughout the building.

The WES staff believe that students learn best when their physical, social, and emotional needs are met. Therefore, the school prioritizes Social/Emotional learning. At the start of the 2018-19 school year, WES began implementing the Positivity Project (P2) in all classrooms. This national program is a curriculum that focuses on Social/Emotional education and equipping students with tools and skills to be kind to others and develop a set of 24 character strengths. Every morning, every classroom begins with a 15-20 minute Positivity Project lesson to frame students’ mindsets for the day. Teachers incorporate P2 into daily conversations and language to use across the school as well. School counselors use the Zones of Regulation in whole classes and small groups to teach students self-regulation skills. They facilitate a “Shipmates” program, which pairs students with a staff member buddy to check in and support them. As a Positive Behavior Intervention (PBIS) School, the PBIS Committee collaborates to lead the school in implementing positive behavior systems. It meets monthly as a team to hear feedback from teachers, brainstorm ideas, and analyze data to inform decisions. The committee plans whole-school challenges and initiatives for classes to set goals and work towards meeting them and earning rewards.

During Covid-19 school closures and Remote Learning, staff adapted and adjusted to meet the needs of WES students and the community. In the early days of the pandemic, the school focused on student access to resources and the morale and connectedness of the school community. Staff worked to provide each student with a device and a hot spot, if needed, and worked with the PTA to create school supply packages and personal care packages for families. Administration did a morning news livestream daily and incorporated fun events like spirit days to increase morale and connectedness as a school. As the school transitioned into hybrid learning during the 2020-21 school year, it focused on student engagement and teacher preparedness. The Wake County Public School System (WCPSS) provided training for all teachers on blended learning. Leadership created a Communications Team, made up of administration, ESL (English as a Second Language) teachers, Social Worker, School Counselors, and Media Coordinator, to focus on reaching out to families and students who were not engaging in remote learning. Through this team, WES maintained contact with all families, fixed technology issues, understood and overcame barriers to remote learning, and increased attendance and engagement. Staff did home visits multiple times to deliver materials and devices or check on students. It focused heavily on creating a safe, healthy environment (both physically...
and emotionally) for staff and students when students first returned to the building in cohorts. Throughout the year, staff continued to prioritize community and connectedness by creating videos for families, doing a livestream morning news daily, and holding virtual events. In the 2021-22 school year, staff have prioritized recovery and intervention, while identifying gaps created by the pandemic and working to provide an outstanding education to all students within all subgroups.
PART IV – CURRICULUM AND INSTRUCTION

1. Core Curriculum, Instruction, and Assessment.

1a. Overall approach, which may include overarching philosophy or approaches common across subject areas:

At Weatherstone, much work is done through PLTs (Professional Learning Teams). Administration protects one morning a week before school to meet in PLTs while providing a 45-minute common planning time daily. Weatherstone utilizes a PLT rotation to ensure every team addresses necessary topics each month. Rotations include Curriculum, Data, and Kid Talk, and also include time for professional development. PLTs unpack standards to ensure all teachers are clear on expectations starting with the end in mind. Teachers also collaborate using CMAPP (Curriculum Management Application) and data to guide instruction. Universal screening data is reviewed three times per year, and Digging Deeper assessments are administered to gather additional information on students flagged “at risk.” Each PLT also has time to collaborate with other school staff and teams to address the students’ needs. PLTs plan with the Intervention Team to identify strengths and weaknesses. ESL teachers, the Counseling and Student Services Team, AIG (Academically and Intellectually Gifted) teachers, the Special Education team, and the Intervention Team all share data with PLTs to determine next steps for all students. Weatherstone follows the MTSS (Multi-Tiered System of Support) process. The MTSS framework promotes school improvement through engaging, research-based academic and behavioral practices. MTSS employs a systems approach using data-driven problem-solving to maximize growth for all students. Leaders in the building coach, consult, and evaluate to support implementation of the three-tiered model. Weatherstone utilizes the Team Initiated Problem Solving Process (TIPS) to determine root causes. Teams test and validate hypotheses using four domains of learning (Instruction, Curriculum, Environment, and Learner). Teachers document plans in ECATS (Every Child Accountability and Tracking System) and progress monitor to ensure all students are trending towards their goals. PLTs systematically review plans and make adjustments as needed. Fidelity checks occur semesterly to improve core instruction. This includes practices like feedback, peer observations, and modeled lessons.

1b. Reading/English language arts curriculum content, instruction, and assessment:

At Weatherstone, teachers provide all students with systematic English/Language Arts (ELA) instruction that follows a WCPSS provided scope and sequence based on the North Carolina Standard Course of Study. Students are exposed to and read high quality fiction and nonfiction texts that increase in difficulty and complexity throughout the elementary years.

In Kindergarten-2nd grades, students receive 150 minutes of whole group and small group ELA instruction daily. The literacy block is structured around the teaching of word recognition skills (phonemic awareness, phonics, and decoding) and language comprehension skills (background knowledge, vocabulary, language structures, verbal reasoning, and literacy knowledge). Students' word recognition skills are taught through direct, explicit phonics instruction using Letterland. Letterland is a research-based phonics program that is highly engaging, story-based, and multi-sensory. The language comprehension skills are taught through interactions with complex, vocabulary rich read alouds and lessons that include deep discussions, text-based questioning, and written response. Through this instruction students will be able to effectively decode words and comprehend oral language to improve their overall reading comprehension skills.

In 3rd-5th grades, students receive 120 minutes of instruction split between whole and small group times. (2nd Grade introduces components of the EL curriculum.) The WCPSS has adapted the EL curriculum in these grades. EL is a comprehensive, research-based curriculum that utilizes culturally relevant texts at each grade level.

WCPSS and WES focuses on the Text, Tasks, Topic and Targets otherwise known as the 4Ts of EL lessons. The compelling topic is what brings the content to life. The topic gives cohesiveness to the unit of study. It is the “what” students are learning about, often connected to specific content knowledge. The culminating assignment is a product or performance task. The culminating task gives students the
opportunity to read for and write with specific textual evidence and to meaningfully apply the standards (targets). This is different from just writing “about” what they have read. The best tasks give students the opportunity to address authentic need and an authentic audience related to the topic. The learning targets are derived from the literacy and ELA content standards that students are expected to meet. The learning targets name what students need to know and be able to do. They are derived from the standards and informed by analysis of the assessment of the standard throughout the curriculum. Learning targets are contextualized to the topic, prepare students for and guide the task, and ensure proper, deep analysis of the text. Students will read closely complex texts (books and articles), and additional texts that ensure students experience a volume of reading at their independent reading level. The text is the primary vehicle through which the topic is taught. Carefully selected texts at the text complexity band for a given grade level give students access to the topic and content targets through close and careful reading. Attention to text selection also ensures that students can practice specific literacy standards so that they have deep access to this topic and learning going forward.

All WES teachers conduct ELA universal screenings three times a year. Students who perform below grade level benchmarks are then progressed monitored according to the WES Intervention Matrix.

1c. Mathematics curriculum content, instruction, and assessment:

Weatherstone’s goal is to provide all students with high quality core instruction in math. The curriculum is organized by a progression of skills with effective teaching practices provided by WCPSS. Teachers in each grade level establish clear goals, aligned with learning progressions, and use those to guide instruction. Students are engaged in tasks that promote reasoning and problem solving. In grades Kindergarten-2nd, students are taught the properties of whole numbers, place value, and addition/subtraction. Computational fluency continues in the 3rd-5th grades, including multiplication/division, fractions and understanding rational numbers. Teachers in Kindergarten-2nd grades are well versed in the Critical Learning Phases outlined in Kathy Richardson's book, "How Children Learn Number Concepts." Teachers in 3rd-5th grades follow the district's math curriculum.

The math block consists of 60-75 minutes of explicit instruction in whole and small groups. Explicit instruction is provided that makes thinking visible so that students can see and apply the steps, processes and strategies necessary to problem solve. Teachers use a multitude of examples, strategies and models that go from concrete to representational to abstract. Teachers provide immediate and corrective feedback so students have an opportunity to correct errors or misconceptions. On-grade level support is provided through scaffolding and differentiation. Supplemental and intensive interventions are based on the individual needs of a student and can be addressed using previous grade level content.

Universal screeners, diagnostic, formative, benchmark, and summative classroom assessments are used in all grade levels to assist in determining those students who may be at risk for learning difficulties. A universal screener is administered three times per year in the fall, winter and spring. In Kindergarten-2nd grades, the Number Knowledge Test is administered to all students to help identify math difficulties or need for additional support services. Renaissance Star Math is used as a universal screener in the 3rd-5th grades. Detailed diagnostic information is provided at the student level through Assessing Math Concepts (K-2) and Renaissance STAR Math (3-8). The North Carolina Early Numeracy Skill Indicator (NCEnsi) is used as a progress monitoring tool in grades K-2. It is directly aligned to the Assessing Math Concepts (AMC) diagnostic assessment. Teachers are able to prioritize the focus skills when determining specific areas of need for math intervention. Dreambox Learning is used in all grade levels to support math instruction and also as an intervention in 3rd-5th grades. Teachers plan common formative assessments and interpret/analyze the data as a PLT.

Through WES’s STEM program, math lessons are often integrated into real world Project Based Learning opportunities. One such example was when the 4th grade math classes collaborated with the WES PTA to design and build the WES Community Garden. Students utilized multiplication, area and perimeter, and fractions in their planning. Another example of math integration within PBLs is the annual 2nd grade Economics Fair. In this lesson students integrate math and social studies content to produce a product or
service for their class. These real-world examples allow students to participate in interactive hands-on activities.

**1d. Science curriculum content, instruction, and assessment:**

All students engage in equitable opportunities to learn and grow in scientific content and understanding. Students are engaged in core science experiences across all grade levels. The science curriculum includes Physical, Earth and Life Sciences. Weatherstone follows a core curriculum aligned with North Carolina Essential Standards for Science. Students engage in scientific and engineering practices, which include but are not limited to, asking questions and defining problems, developing and using models, analyzing data, and constructing explanations and designing solutions. The curriculum allows for scaffolding using text, writing, vocabulary and speaking/listening.

Beginning in Kindergarten, students are taught force and motion, matter properties and changes, earth systems and processes, and living organisms. As they move into 1st grade, content continues to include molecular biology and ecosystems. 2nd grade content includes evolution and genetics. In 3rd-5th grades, students explore the 5E Inquiry model which includes Engage, Explore, Explain, Elaborate and Evaluate. Students delve into energy conservation and transfer in 3rd grade. Earth History and Earth in the Universe are introduced in 4th grade. And in 5th grade, students learn about Evolution and Genetics. As students progress through the elementary grades and beyond, the depth and rigor of learning will deepen and build upon previously learned content.

Performance tasks and assessments are vital components of the teaching and learning process. Students are able to demonstrate their understanding through observations, writing, and presentations. Assessments also include individual/group projects, multimedia presentations and models.

In addition to the science curriculum, all teachers at Weatherstone offer students opportunities almost daily that integrate the STEM subjects into their learning. Within monthly PBL units, students must organize learning across disciplines. Students are engaged in science and STEM throughout classes and disciplines.

**1e. Social studies/history/civic learning curriculum content, instruction, and assessment:**

The Social Studies curriculum provides Kindergarten-5th grade students the opportunity to engage in disciplines including inquiry, behavioral sciences, civics and government, economics, geography and history. Classrooms are structured with highly collaborative activities that allow students to engage in academic conversations and study rich academic topics. Kindergarten students are taught to develop an awareness of the similarities and differences among individuals in the classroom as well as within the school, community, and world. In 1st grade, students examine how they are connected to people, places and the environment around them. The focus of learning shifts in 2nd grade as students learn about America and the many factors that contribute to the development of our national identity. 3rd grade content focuses on our community and state. The 4th grade curriculum examines North Carolina’s role in major United States events. This lays the foundations necessary for delving into United States history in 5th grade.

Teachers incorporate inquiry-based learning to help students make their own connections about what they learn. Their curiosity helps them engage and gain a deeper understanding of topics and content, instead of primarily memorizing and recalling rules, ideas or formulas. Resources provide an opportunity for reading, writing, speaking, and listening through a variety of instructional strategies. Teachers use a variety of assessment tasks aligned with the standards. PLTs also collaborate to create authentic, relevant, and student-centered lessons daily. Teachers consistently use hands-on learning opportunities in class, including their PBL units, but also manipulatives and projects where students use materials and real-world objects. Through PBLs, all teachers provide students with real-world, hands-on experiences that connect to the social studies content and the students’ world and lives around them.

**1f. For secondary schools:**
1g. For schools that offer preschool for three- and/or four-year old students:

All WCPSS preschools follow North Carolina’s Foundations for Early Learning and Development are the state standards for understanding children’s learning and for guiding curricular choices. In order to support NC Foundations, Wake County Preschool Programs has adopted The Creative Curriculum® for Preschool 5th Ed. as its core curriculum. The areas of development and learning covered are: Social-Emotional development, Cognitive, Physical (Gross and Fine Motor), Language, Literacy, Mathematics, Science and Technology, Social Studies, The Arts, and English Language Acquisition. WCPSS preschools also follow NCEES universal standards.

There are currently 168 programs in 100 elementary schools and one university site. In addition, they serve students in four Developmental Day Centers and in multitudes of private childcare and home settings through itinerant services.

Studies from Stanford University show that children with a rigorous preschool experience consistently outperform peers in kindergarten in readiness.

Weatherstone Elementary school hosts a WCPSS district low-incidence preschool class. The class is taught by one certified teacher and two Instructional Assistants. Due to the unique high needs of the students, they are supported by several district staff, including a Physical Therapist, Occupational Therapist, Audiologist, and staff from the Office of Early Learning. Students go through the Special Education process to get placed in our preschool program from across the district. Each year, the WES preschool has 3-8 students in the classroom, ages 3-5. This school year the class has grown from 5-7 students. The preschool teacher and staff work to analyze data, collaborate with families and related services to meet the unique needs of all students. Together, they enable each student to access the curriculum, support, and resources that they need to grow and meet their goals.

2. Other Curriculum Areas:

All K-5th grade students at Weatherstone attend five Specials classes weekly: Art, Music, Physical Education, Readers’ Theater, and Design & Innovation. Every year, Administration creates a school-wide schedule, which includes a rotation allowing each class to have a daily 45 minute special throughout the year.

Design & Innovation encourages students to utilize the Engineering Design Process when problem solving. Students complete STEM Challenges that supplement classroom instruction. Students explore various forms of technology that facilitate an environment of creativity and critical thinking such as coding and robotics. In addition, students are challenged to collaborate and communicate with peers as they brainstorm ideas and work together to achieve common goals.

In Art, students learn observational, fine motor, and creative thinking skills. Students learn art history, art production, art aesthetics and art criticism. There are four key pillars in Art: Personal Choice and Vision, Critical and Creative Thinking, Authentic Application and Collaboration, and Literacy. Students construct and solve problems of personal relevance and interest when expressing themselves through visual art. Students combine and apply artistic and reasoning skills to imagine, create, realize, and refine artworks in conventional and innovative ways.

Music at Weatherstone encompasses many different elements of musical knowledge. Students sing and play instruments of all types, listen to and reflect on the lives of composers, discuss the moods of pieces they hear, and share feelings on particular pieces from different musical periods.

4th-5th graders may participate in chorus, as another extension adding on the skills they learn in class. Music connects to other academic areas through literature, the science of sound, using notes values mathematically, and connecting with grade levels by integrating their curriculum.

Readers’ Theater is a literacy-based class where students expand on their reading and writing skills. The
lessons are aligned with grade-level standards and cover topics or activities classroom teachers introduce. Students practice fluency, reading comprehension, vocabulary, and writing skills by interacting with texts in a variety of ways such as projects, performances, games, speaking, and listening activities.

Additionally, the Media Center at Weatherstone Elementary School is the heart hub of learning and exploration. It promotes self-discovery, information literacy, and an appreciation for reading through an equitable, inclusive, and culturally responsive collection that encourages every student’s potential. The Media Center operates on a flexible schedule; students come in freely throughout the day to choose stories for themselves, nestling into one of the comfy spaces to read. A love of reading is nurtured early with readings and retellings of engaging picture books and nonfiction material. Often, students can be found working in groups creating a product that redesigns the solution found in stories. The Media Specialist works closely with all grade level teachers to provide lessons throughout that enhance and support the entire curriculum. Lessons are designed to foster 21st century skills and utilize the eWise research model. Students are taught to wonder on topics of their choice, investigate using appropriate websites, and synthesize and express their learning in a variety of ways. Some examples of student expression are demonstrated through collaborative green screen movies, video responses to literature using flip grid, and google slide presentations on topics of their choice.

3. Academic Supports

3a. Students performing below grade level:

Quality core academic practices are well-defined across all grade levels and content areas by the essential components of instruction, curriculum and environment. Students performing below grade level are provided with additional support in academic areas based on the MTSS Framework. Students needing additional support are identified through the use of data gathered by the classroom teacher, including mClass data, STAR, NKT (Number Knowledge Test) and Digging Deeper assessments. Prior to the start of an intervention, teachers also look at past data to help determine individual students’ needs. Parents are invited to participate when plans are created and revised. Parents are also provided with a copy of the Intervention plan.

Intervention support is categorized as supplemental or intensive and is provided by the classroom teacher or an interventionist using the push-in or pull-out model. The instructional practices provided are explicit, systematic and matched to the students’ individual needs. The student receiving support is frequently progress monitored to evaluate the effectiveness of the support provided. Adjustments are made based on the data gathered and the students’ progress. An increase in frequency, intensity, and duration of support is made depending on student data and to also ensure that the student is on track for success.

Intervention plans are created and documented in ECATS for students receiving supplemental and intensive services. A predetermined goal is set and progress monitoring data is tracked to ensure that the interventions implemented are moving a student towards the targeted goal. Students no longer receive intervention when progress monitoring data indicates they are likely to succeed with core instruction without further support. Supplemental and/or intensive supports are gradually released to ensure a stable transition back to core.

3b. Students performing above grade level:

In Wake County Public Schools, AIG students are typically identified for differentiated services during a universal screening process during the third-grade year. This year, the process also took place for 4th graders, as there was no universal screening during the 2020-2021 school year due to Covid.

Students can be identified in ELA, math, or both areas and receive pull out resource class services once per week per subject area, for 45 minutes. This instruction can be either synchronous or asynchronous, as there are currently about seven identified AIG students who are virtual. Fourth and fifth grade students are served from the beginning of the school year if identified the previous school year or begin the semester after they qualify if testing/placement is done during the school year. Third grade identified students begin services in
the beginning of the fourth quarter of the school year.

While there is no official AIG programming for Kindergarten-2nd, these classes can receive differentiated work to complete independently from the AIG teachers based on teacher or parent requests. All classrooms and teachers are expected to differentiate instruction and provide extension for students who are performing above benchmark. These practices ensure these students who are above grade level are challenged and given opportunities for enrichment. The WES AIG teachers have participated in training entitled Nurturing Bright Minds, focusing on increasing the development of historically underrepresented minority students.

Additionally, AIG teachers consult and collaborate with classroom teachers at any time for both identified and non-identified students. They work with grade levels to provide strategies and tools to support AIG students with extension and differentiated work in the regular education classroom.

Weatherstone’s AIG Services school plan also includes in-class flexible grouping and differentiated instructional units and/or centers in regular classrooms to help meet the needs of students who qualify for AIG.

3c. Special education:

Special Education provides Specially Designed Instruction to students who have been identified with a disability. Students can receive Specially Designed Instruction in reading, writing, math, and social emotional behavior. Students may also receive related services such as physical therapy, occupational therapy, and speech. There are different levels of support and numerous special education programs at Weatherstone. There is a low incidence preschool classroom, an EBS (Emotional Behavior Support) I classroom, an EBS II classroom, two full time CCR (Cross Categorical Resource) teachers and one part time CCR teacher. Students in Special Education have individualized education plans (IEPs) with goals and accommodations to meet their specific needs. Special Education teachers collaborate with families, classroom teachers, and related service providers to collect and analyze data. They track student performance, collect information from teachers and observations, and gather data from evaluations. They use this data to make IEP decisions with the team and ensure that the school is meeting the individual needs of each student. In addition to providing direct services to students, Special Education teachers collaborate with classroom teachers to ensure students are receiving support in the regular education classroom. Special Education teachers at Weatherstone have led professional development in the past to equip all teachers with strategies and tools to support all of our students and ensure their needs are met. Special Education students can have accommodations and modifications to support them in the general education setting and on district assessments as well. Overall, the Special Education team and classroom teachers work as a unit to analyze data, identify needs, and create plans to support Special Education students and enable them to succeed.

3d. English Language Learners, if a special program or intervention is offered:

At Weatherstone, ESL services include a pull-out program that offers language instruction to students who are English Learners (EL). EL students attend ESL class 2-5 times a week, depending on need. For the remainder of the day, students work with their classroom teacher and peers, while being immersed in a language-rich environment. ESL and classroom teachers collaborate in PLTs to offer students meaningful learning experiences at their level. Weatherstone utilizes Talking Points to communicate with families. This program allows text messages to be typed in English by staff and received in the home language to families.

In addition to working with pull-out groups, ESL teachers collaborate with school leadership and classroom teachers to support best practices at Weatherstone. The ESL team worked with the Equity Committee and School Improvement Team this year to focus on supporting ESL students and closing the achievement gap. Specifically, they scheduled time to meet with each grade level PLT to discuss individual EL students and provide strategies and best practices for supporting those students in the classroom. In the fall, ESL teachers also provided an optional professional development session for all staff members about supporting EL students in the regular education classroom.

WES partners with two outside organizations that support many of our EL students: Avent West and Read
and Feed. Avent West Children's Mentoring helps provide fun activities, snacks, and tutoring for students living in the Avent West Raleigh area. The elementary program meets at Western Boulevard Presbyterian Church on Tuesdays and Thursdays. They provide additional instruction, literacy support, and mentorship to students and families. Read and Feed helps develop literacy skills while also providing meals and tutoring assistance for students. They meet in the Mobile Estates neighborhood in Cary on Wednesdays. The partnership with both of these organizations has enhanced the instruction, provided social/emotional support, and helped meet the physical needs of many of the WES families.

3e. Other populations (e.g., migrant, homeless), if a special program or intervention is offered:

Weatherstone personnel partner with the McKinney Vento office to ensure stability, maintain school assignment, and provide support to families through the transition period. The school social worker serves as a point of contact between the McKinney Vento office and the school and works to support student needs. The social worker immediately refers students to keep them at Weatherstone and maintain consistency for the students and families. The social worker and school counselors collaborate to help families connect to the resources that they need. The Counseling and Student Services Team focuses on the overall health and wellbeing of students in order for them to be able to succeed academically as well. Weatherstone also partners with New Horizons Church for the Backpack Buddies program, which provides food to supplement a family’s pantry for several students on a weekly basis. This program allows Weatherstone to provide support for the physical needs of many of the students in transition. Weatherstone has partnered with Note in the Pocket, a local organization that provides clothing to impoverished and homeless children in Wake County and Wake County Public Schools.

Alliance Bridge to Service is a partnership between Alliance Mental Health and Wake County Public Schools. Weatherstone school counselors and the social worker partner with Alliance and refer families to help them access mental health resources and connections.

During the Covid-19 pandemic, Weatherstone conducted home visits to check on students in transition and to provide school supplies and personal hygiene kits. Additionally, the social worker and Communications Team worked to identify technology and access needs for many of the students and provide them with hot spots and devices. Our Media Coordinator and STEM Coordinator maintained communication with families to troubleshoot technology issues and assist families in successfully using technology to access Remote Learning.
PART V – SCHOOL CLIMATE AND CULTURE

1. Engaging Students:

Student engagement at Weatherstone is a priority and a requirement for success. The staff strive to make learning meaningful to students and to give them opportunities to be an active part of the community. Through the use of STEM programming and Project Based Learning, students learn the Engineering Design Process and how to approach problems in a variety of ways, both independently and by collaborating with peers. Students learn to stop, reflect, and try another path if at first they are not successful. Prior to Covid-19, Weatherstone was a Bring Your Own Device school; since the pandemic, Weatherstone (along with WCPSS) has been a 1:1 device school. Weatherstone implements technology enhancing student learning and engagement while teaching students to become digital citizens.

Social/Emotional engagement is also a priority at Weatherstone. School counselors work with teachers to identify students who need supplemental instruction on social skills. Counselors use the ASCA (American School Counselors Association) National Model as the basis for the comprehensive counseling program. Weatherstone supports all students in building peer relationships through large group instruction on problem solving, empathy, and managing emotions. Weatherstone teaches specific skills in small groups to help struggling students form and maintain friendships.

The use of PBIS, the Positivity Project, and the Zones of Regulation schoolwide has created a climate of positivity and a proactive approach to student behavior. With the Positivity Project, teachers are provided the opportunity every morning to create relationships with their students and discuss emotions in an engaging manner. By teaching the Zones of Regulation in all classrooms, both students and teachers use the same language to express their feelings and practice appropriate coping skills to help themselves regulate their emotions. The PBIS team develops unique incentives for students to strive for not only as a class, but as a community.

During Covid-19 school closures and Remote Learning, Weatherstone worked to improve student engagement by creating a Communications Team to focus on student attendance and participation. Members of this team made home visits, delivered materials, and made phone calls and contact with families to identify and address barriers to Remote Learning. Teachers hosted “lunch bunch” meetings to give students opportunities to socialize with their peers during Remote Learning. Staff held Google meets with parents and students to problem solve and reduce anxiety about engaging in virtual learning. Weatherstone also held whole-school virtual events, including a “Pajama and Bedtime Stories” night, virtual dance parties, and virtual Open Houses and Meet the Teacher.

2. Engaging Families and Community:

Weatherstone partners with the PTA and several community organizations to enhance student learning and school improvement. The PTA supports Weatherstone financially and instructionally by purchasing items like TVs for classrooms, play shades for outdoor learning spaces, and grants for each classroom teacher to use for instructional materials each year. Through the PTA’s support, students and teachers have access to materials and resources to enhance instruction and student success. The PTA helps plan, organize, and facilitate school events and activities like Multicultural Night, the STEM Expo, guest speakers, Night of the Arts, and Cultural Arts performances. Through their partnership, Weatherstone provides real-world and hands-on experiences for students that enhance the instruction they receive in class.

Additionally, Weatherstone partners with several local organizations and businesses to support students and the school. Avent West Children's Mentoring helps provide fun activities, snacks, and tutoring for students living in the Avent West Raleigh area. The elementary program meets at Western Boulevard Presbyterian Church on Tuesdays and Thursdays. They provide additional instruction, literacy support, and mentorship to several student subgroups. Read and Feed develops literacy skills while also providing meals and tutoring assistance for students. They meet in the Mobile Estates neighborhood in Cary on Wednesdays. Weatherstone’s partnership with both of these organizations has enhanced the instruction, provided
social/emotional support, and helped meet the physical needs of many families. Weatherstone also partners with New Horizons Church for our Backpack Buddies program, which provides food to supplement a family’s pantry for several students on a weekly basis. New Horizons has provided school supplies for several families as well.

Weatherstone engages with the community through STEM practices and partnerships. Prior to Covid, businesses like Mad Science and Play-Well Technologies held after school classes that were offered to students at all grade levels. Kids are Scientists, Too (KAST) is an afterschool program run by student volunteers from a high school that was available to 4th and 5th grade students. Grade levels provide students with many opportunities to work with STEM professionals. Through hands-on learning experiences, presentations, and field trips, students learn about the jobs of people in the community in STEM fields multiple times a year. Weatherstone participates in WCPSS STEM Collaborative Network and collaborates with other STEM schools to brainstorm and share ideas and continuously improve. Kindergarten and first grade students participate in Community Helper Day every year, which brings local first responders to the school to meet and interact with students.

3. Creating Professional Culture:

At the beginning of the year, Weatherstone administrators create anonymous surveys for staff to submit to provide input. Administrators then meet to review the data, make changes, and create professional development for staff. For example, in fall of 2021, Weatherstone used staff survey data to create optional in-house professional development sessions. Teachers could choose to attend sessions on topics like ESL, Covid-19, and Social/Emotional support for students. Administration also analyzes data from the North Carolina Teacher Working Conditions Survey (NCTWCS) and identifies lower-scoring areas to target for school improvement.

Weatherstone’s Beginning Teacher (BT) Coordinator hosts monthly meetings to support BTs and provide specific support and professional development to help them grow. She also coordinates the mentor program, as each BT is paired with a veteran teacher to meet with regularly.

Weatherstone participates in all district professional development and creates time in teacher schedules for them to attend and complete trainings. Administration intentionally protects time on teacher workdays, and all teachers have a 45-minute common planning time every day during Specials. One morning a week before school is designated for PLTs to meet. PLTs follow a rotation that includes Kid Talk, Curriculum, Data, and Professional Development.

Through the PTA, Weatherstone sends about ten staff members each year to the NCTies (North Carolina Technology in Education) conference. Participants of the conference then collaborate on sharing new resources with other staff. Additionally, the STEM Coordinator and Media Coordinator survey staff each year on STEM/technology needs. Based on this, the school identifies staff members or other WCPSS personnel to offer learning opportunities to our school.

During the Covid-19 pandemic, Weatherstone implemented several practices to support staff. Weatherstone provided time for teachers to complete district training on blended learning. PLTs and leadership meetings focused on addressing concerns and logistics for remote learning and increasing student participation and engagement. Administration partnered with the PTA to provide breakfasts, lunches, snacks, and other thoughtful items for staff. Administration provided as much flexibility and accommodations as possible for requests during the Covid-19 pandemic to help everyone feel comfortable, safe, and supported.

4. School Leadership:

Weatherstone Elementary’s school leadership is led through a collaborative team approach focused on student achievement with an emphasis on balancing the social and emotional needs of the students and staff. The administration is focused on both high academic proficiency as well as strong growth across all subgroups. A focus on equity is also a priority in allocating both material and staffing resources.
The following committees play a key role in aligning the school’s systems and structures: Leadership, School Improvement, Equity, Positive Behavior Intervention Support (PBIS), Science Technology, Engineering/Media and Technology (STEM/MTAC), and Intervention. Each of these committees provide multiple opportunities for staff to build their leadership capacity. There is a monthly schedule provided for each of these committees to meet and provide feedback to grade level PLTs.

Each year, Weatherstone uses an application system to identify team leaders for each grade level and create a Leadership Team. Grade chairs lead and facilitate PLTs with their team weekly and serve as representatives on the Leadership Team. The Leadership Team meets monthly to discuss staff input and concerns, share important updates, and make school decisions.

Weatherstone’s PLTs meet weekly to analyze data to improve teaching and learning, brainstorm, plan, and collaborate on lesson plans, PBLs, and other STEM activities. They also produce ELA, Math and Science Common Formative Assessments at least quarterly to measure student learning and growth.

In collaboration with the STEM/MTAC Committee, PLTs review STEM integration plans with specialists, update their progress on the NC STEM rubric, and participate in Professional Development provided throughout the year aligned to the WES School Improvement Plan.

During COVID-19 school closures, the school Leadership Team used flexible committee structures to align with the ever-changing educational needs. For example, there was a significant increase in the need to focus on adapting instruction to meet the needs of students learning remotely. This included creating new committees such as Communication and Engagement to track down students that were not consistently attending virtual lessons.

Finally, the Leadership Team focuses on celebrating and highlighting staff and school accomplishments. These recently have included WRAL Teachers of the Week, renewing the NC STEM School of Distinction, multiple local and national grant winners, a WCPSS Employee Excellence Award, and yearly Cary Chamber of Commerce Awards.

5. Culturally Responsive Teaching and Learning:

The Weatherstone Equity Committee meets monthly to analyze data, discuss patterns, and make decisions to support equitable practices across our school. The Equity collaborates with the School Improvement Team to focus on subgroups and areas of growth. It analyzes family and student survey data, behavior data, and assessment data to identify trends and guide decisions. In the past, it has done book and article studies and focused on student discipline practices and conduct/work habits comments and scores on report cards. This year, it focused on supporting the ESL population (which is approximately 20% of the student body) and training teachers on how to meet the needs of all ESL students. ESL teachers met with each PLT to discuss individual students and their needs and to provide teachers with tools and practices to better support them in the regular education classroom.

School counselors work to equip teachers, students, and parents with strategies to support an equitable school community. They work to eliminate achievement gaps by engaging the Intervention Team to create plans to help all students be successful. They work to eliminate disparities in discipline by teaching coping/problem solving skills in every classroom. If a student is having behavior difficulties they create a Prevent-Teach-Reinforce plan to help them learn the skills they need instead of using suspension. The WES school counselors delivered Anti-Bias guidance lessons to K-5 classrooms. They help parents navigate difficult current events through our newsletter literature section and provide resources on how to discuss current social and cultural events with their children.

WES has partnered with Parents Know More to host a guest speaker to present (separately) to parents and fourth/fifth grade students about cyber safety and social media awareness. As an expert in the field, this speaker addressed current trends, issues, and policies about social media and technology used to inform families and students, help them become responsible digital citizens, and equip them with the tools they need to be safe and successful in today’s digital world. The Design & Innovation class also teaches students...
how to use technology safely and responsibly and integrates digital citizenship skills for all students.

The WES Media Center promotes self-discovery, information literacy, and an appreciation for reading through an equitable, inclusive, and culturally responsive collection that encourages every student’s potential. Our Media Specialist intentionally chooses books that represent the student population and create a diverse media collection. Recently, it partnered with Scholastic to provide texts on Women in STEM for the school.
PART VI - STRATEGY FOR ACADEMIC SUCCESS

WES staff believe that Weatherstone has many practices that contribute to our success, however, the STEM program stands out as one practice that has had the greatest impact. As a NC STEM School of Distinction at the Model Level, STEM is a defining quality and philosophy throughout the building. Weatherstone incorporates STEM practices into every classroom by having students engage in PBLs and use the Engineering Design Process. The school has two specials that are specifically designed with a STEM focus: Reader’s Theater and Design & Innovation. WES applied for and received a grant in 2017 to transform our media center into a STEM learning space by adding flexible seating, a lego wall, and a green screen for the student news crew team. Also through this grant, the school purchased flexible seating options for all classrooms throughout the building. The STEM/MTAC Committee every year at Weatherstone, which is led by our Media Coordinator.

A cornerstone event of our STEM program is our annual STEM Expo. Grade levels, along with outside programs like NC State Rocketry, Coding Clubs, LEGO Builders), excite students with hands on learning and fun. Over the last three years, the school transitioned to student-led activities at all grade levels. Classrooms showcase concepts the students have learned, and students plan and run the activities.

Through STEM, the WES staff teach students the growth mindset–to never give up and reflect on what you can do differently to solve a problem. Students learn to keep going, try something new, think critically, and explore solutions outside of the box. STEM practices teaches them grit, independence, and stamina. These skills and mindsets help them to perform better on tests, develop more creative projects, solve problems, and grow in literacy. WES staff believe students perform better and create deeper in every subject by learning STEM philosophies and the Engineering Design Process. STEM practices also expose students to programs and projects that develop their technology and critical thinking skills. Through the Innovation & Design special, they work with tools and projects that challenge their thinking. Through specials and the overall STEM and philosophy practices, WES students leave the school with skills that will help them to excel in the 21st century, digital world. They also learn how to interact with technology appropriately and become digital citizens, a skill which will serve them well throughout life. The STEM mindset not only enables students to be more successful in their academics, it also prepares them for success in life.