U.S. Department of Education
2023 National Blue Ribbon Schools Program

[X] Public or [ ] Non-public

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

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

Official School Name Okaloosa STEMM Center
(As it should appear in the official records)

School Mailing Address 379 Edge Avenue
(If address is P.O. Box, also include street address.)

City Valparaiso State FL Zip Code+4 (9 digits total) 32580-1033

County Okaloosa

Telephone (850) 833-4120 Fax

Web site/URL
https://www.okaloosaschools.com/o/stemm E-mail MartinS@Okaloosaschools.com

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.

Date
(Principal's Signature)

Name of Superintendent* Mr. Marcus Chambers E-mail ChambersM@OkaloosaSchools.com
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name Okaloosa Tel. (850) 833-3100

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.

Date
(Superintendent's Signature)

Name of School Board
President/Chairperson Dr. Diane Kelley
(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.

Date
(School Board President's/Chairperson's Signature)

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 2023 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 2018 and each tested grade must have been part of the school for at least the three years prior to September 2022.

5. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2018, 2019, 2020, 2021 or 2022.

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 (2022-2023) 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):

22 Elementary schools (includes K-8)
8 Middle/Junior high schools
6 High schools
13 K-12 schools

49 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/ (Find your school and check "Locale")

[ ] Urban (city or town)
[X] Suburban
[ ] Rural

3. Number of students in the school as of October 1, 2022 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:

Grade	# of Students
PreK	71
K	0
1	0
2	0
3	0
4	0
5	0
6	119
7	99
8	87
9	0
10	0
11	0
12 or higher	0
Total Students	376

*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
3.8 % Asian
4.3 % Black or African American
11.2 % Hispanic or Latino
0 % Native Hawaiian or Other Pacific Islander
68.9 % White
11.8 % 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 2021 - 2022 school year: 10%

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.

Steps For Determining Mobility Rate	**Answer**
(1) Number of students who transferred ***to*** the school after October 1, 2021 until the end of the 2021-2022 school year	17
(2) Number of students who transferred ***from*** the school after October 1, 2021 until the end of the 2021-2022 school year	19
(3) Total of all transferred students [sum of rows (1) and (2)]	36
(4) Total number of students in the school as of October 1, 2021	347
(5) Total transferred students in row (3) divided by total students in row (4)	0.10
(6) Amount in row (5) multiplied by 100	10

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

No students currently enrolled

English Language Learners (ELL) in the school: 0 %

0 Total number ELL

7. Students eligible for free/reduced-priced meals: 23 %

Total number students who qualify: 85

8. Students receiving special education services with an IEP: 20 %
Total number of students served 76|

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 should be reflected in the table below. It is possible that students may be classified in more than one condition.

2 Autism	0 Multiple Disabilities
0 Deafness	0 Orthopedic Impairment
0 Deaf-Blindness	4 Other Health Impaired
63 Developmental Delay	1 Specific Learning Disability
0 Emotional Disturbance	2 Speech or Language Impairment
3 Hearing Impairment	0 Traumatic Brain Injury
0 Intellectual Disability	1 Visual Impairment Including Blindness

9. Students receiving special education services with a 504: 8 %
Total number of students served: 30

10. Number of years the principal has been in the position at this school: 5

11. 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.

	Number of Staff
Administrators	1
Classroom teachers, including those teaching high school specialty subjects, e.g., third grade teacher, history teacher, algebra teacher.	20
Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher etc.	3
Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.	5
Student support personnel e.g., school counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	3

12. 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 22:1

13. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

Required Information	2021-2022	2020-2021	2019-2020	2018-2019	2017-2018
Daily student attendance	94%	96%	96%	94%	96%
High school graduation rate	0%	0%	0%	0%	0%

14. **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 2022.

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

15. 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.

16. In a couple of sentences, provide the school's mission or vision statement.

Through rigorous and innovative academic programs using community partnerships to enrich learning, we inspire students to be intellectually curious, critical thinkers, and creative problem-solvers so they may become the next generation of Science, Technology, Engineering, Mathematics, and Medical (STEMM) leaders.

17. Provide a URL link to the school's nondiscrimination policy.

https://www.okaloosaschools.com/o/stemm

18. **For public schools only**, if the school is a magnet, charter, or choice school, explain how students are chosen to attend.

The Okaloosa STEMM Academy is a public middle school with a focus on STEMM (Science, Technology, Engineering, Math, and Medical). Any 6th-, 7th-, or 8th-grade student in Okaloosa, Walton, or Santa Rosa counties is welcome to apply to the STEMM Academy. Because the STEMM Academy has a rigorous, advanced program of study with high school-level classes offered beginning in 6th-grade, students are selected based on a strong academic record with high math and science achievement. While anyone may apply, we do invite students scoring Level 4 or 5 on standardized assessments. Applications include students' academic data, rubrics assessing students work habits, student and parent essays as well as letters of recommendation. Applications are reviewed by a committee.

The Okaloosa STEMM Academy also serves as a center for PreK students with disabilities. PreK students are identified through Child Find.

PART III – SCHOOL OVERVIEW

The STEMM (Science, Technology, Engineering, Math, and Medical) Academy is an innovative middle school that provides a free and public education to sixth- through eighth-grade students with a curriculum focused on academic rigor and acceleration. The STEMM Academy was established in 2012 through a partnership among a group of interested community stakeholders, heavily influenced by the organizations on our local Air Force Base, as a multi-faceted academy for high-ability students interested in pursuing careers in science, technology, engineering, math, or medicine.

The STEMM Academy started with an initial class of sixth-grade students, expanding to include 7th and 8th grade the next two years. In its eleven years of serving the community with excellence in academics, STEMM has grown from an initial enrollment of less than 90 students to its current enrollment of more than 300 middle school students. In 2018, STEMM added a central hub for prekindergarten students with disabilities. Our Little Stingers Program consists of voluntary prekindergarten (VPK), prekindergarten for students with disabilities (PreKD), and Community Classrooms which are a blend of VPK and PreKD students.

We have a wide diversity of students including military and non-military families, high income and low income families, and parents of all levels of educational background, but all our families show a strong commitment to their children and value education. The families, faculty, and administration emphasize student academic achievement as our primary mission and are committed to continuous school improvement. Adhering to the rigorous national accrediting standards, STEMM has been accredited by CogNiA/AdvancED every year. STEMM has consistently earned an "A" rating from the Florida Department of Education's School Recognition Program. In 2022, the STEMM Academy was ranked as the top performing middle school in the state of Florida based on our state assessment results.

Our program has been specifically designed to enable students to transition to high school having completed numerous high school courses including Algebra I Honors, Geometry I Honors, Physical Science Honors, Fundamentals of Web Design, and Earth Space Science Honors. The classroom settings are enhanced by high tech equipment and resources, many of which were contributed by military, community, private, business, or non-profit organizations.

STEMM follows a rotating A/B block schedule with 100-minute classes that support performance-based and laboratory instruction. This means that, while students have six classes on their schedule, they go to only three of those classes on the A day, and then go to the other three classes on the next day, the B day. The rotating A/B block schedule replaces a more traditional program of six 50-minute sessions that meet daily. With longer class periods and fewer interruptions for class changes, teachers can dive deeper into learning objectives and cover more material within the period. Longer class periods facilitate the use of project based learning, science laboratory investigations, collaborative learning, and similar tasks that take more than 50 minutes to complete. Three classes per day lessens the workload for both students and teachers. Since classes meet every other day, teachers are less rushed in grading and can provide more relevant feedback. Students have less homework with fewer classes each day. With the additional class time, homework can be started in class with the teacher ready to provide feedback while the work is in progress.

The STEMM Academy is a successful school because we support the whole child emotionally, socially, and academically as they become empowered learners. We continually provide motivation and learning strategies to support students. Students learn self-management skills to regulate themselves as they develop cognitively and physically.

We develop well-rounded citizens through a plethora of activities throughout the year. Our students engage in acts of service for our community such as partnering with our littles as mentors, canned food drives for the local food bank, collecting coats for needy children, and bringing in their change to help support a shelter for children in crisis. Our school calendar has an array of events that allow stakeholders to collaborate in planning enrichment activities that educate the mind, spirit, and body of our students, developing well-rounded citizens. School-wide events include Kindness Week, PurpleUP! Day supporting

military children, Field Day, Multicultural Day, Red Ribbon Week, and many more. Social development is fostered through student leadership opportunities such as student council, HOPE Squad, MultiCultural Council, and National Junior Honor Society.

Our school serves many military families from the nearby Air Force base, a Navy EOD (Explosive Ordinance Disposal) school, and an Army Special Forces cantonment.

We are in a unique area to have military families from so many different branches of service. Nearly 30% of our students are military-connected students. STEMM is a Purple Star Campus, a designation that recognizes schools that provide extra support for children of military families. We are committed to providing critical transition support for the educational and socio-emotional challenges military-connected children face as they relocate to new schools due to a parent's change in duty station. Our focus is to eliminate barriers to the academic success of military-connected children and to assist military families with education matters that are unique to the military lifestyle such as frequent moves, deployment, and educational differences that exist from state to state. When new students join the STEMM Academy, the Student2Student (S2S) Ambassadors provide a welcoming face to ease the stress of joining a new community. On the new student's first day on campus, an S2S Ambassador is assigned as a mentor to greet them in the morning, help them find their new classes, be a buddy at lunch, and answer questions about extracurricular activities, clubs, and coursework. The S2S Ambassadors check in with the new student regularly during the first few weeks to assure that the new student is adjusting to their new school.

PART IV – CURRICULUM AND INSTRUCTION

1. Core Curriculum, Instruction, and Assessment.

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

While the STEMM Academy was created with a focus on math and science, we believe that reading and writing are the essential foundation used across all subject areas. Our students learn to apply reading strategies not only in their English Language Arts (ELA) classes, but across all subject areas. Based on Florida's Benchmarks for Excellent Student Thinking (BEST) Standards, our ELA instruction provides students opportunities to analyze text across the genres within our textbook and to evaluate supplemental novels, speeches, and multimedia items such as songs or paintings. Reading different genres like fiction, poetry, and informational text improves students' overall comprehension, boosts their critical thinking skills, increases reading stamina, and exposes them to rich, subject-specific vocabulary. Our students work at an accelerated pace on evidence-based tasks using challenging texts to foster critical thinking. Students discuss and engage regularly in student and participate in peer reviewing or critiques to promote growth, ownership, accountability, and the diversity of ideas.

Our students become college and career ready by learning to communicate clearly in writing, speaking, and presenting. Writing skills are developed through narrative, argumentative, and expository modes. Oftentimes, students collaborate to develop arguments for essays. Participation in community essay contests and speech and debate competitions provides students with an opportunity to showcase their talents to a wider audience.

ELA instruction is driven and differentiated by data. Data from the Florida Assessment of Student Thinking (FAST) Progress Monitoring assessments informs instructional practices. Using results from summative and frequent formative progress monitoring assessments, teachers conduct individual data chats with their students, empowering them to take ownership of their learning. Students set their own goals to address their weaker areas. Classroom assessments are used often to gauge enrichment, student progress, and remediation needs. Some formative assessments used are quick writes, exit slips, peer editing, and individual conferencing. Summative assessments used include quizzes, essays, and various projects and presentations.

Collaboration between grade levels fosters vertical alignment within the department. As a smaller school, our department depends on each other for support. Collaboration allows teachers to brainstorm creative ideas that help engage our unique set of students. It also provides an avenue for professional development. Teachers often observe each other and provide assistance with various teaching strategies to help improve their craft.

ELA teachers also promote cross-curricular integration that also addresses areas of difficulty identified in the data. For example, the data showed that our 7th grade students expressed difficulty with comprehending informational text. The ELA department used texts from the BEST Civics Literacy Readings and Supreme Court Cases in our ELA program that would align with the content students were learning in their Civics course, with the goal of integrating at least two resources each month. Students are also introduced to literature from historic time periods as they build a body of knowledge useful in being able to interpret multiple layers of meaning. Collaborating horizontally with other subjects shows our students how what they are learning connects to other real-life skills and experiences. Through the thoughtful selection of both literary and nonfiction texts, our teachers make sure our students are fully prepared for the responsibilities associated with American citizenship and the future workforce.

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

STEMM's mathematics program is designed to accelerate and enrich Florida's BEST Standards for mathematics. The BEST standards provide students with a mathematical education that allows them to progress through post-secondary education as well as supporting student success in the workforce and preparing them for the high-demand jobs of tomorrow. With the vision of preparing the next generation of

science, technology, engineering, and mathematics leaders, our school moves students beyond "plug and chug" and develops real world conceptual thinkers and problem solvers.

Subject-acceleration in mathematics challenges each student to reach their full potential. Our students skip 6th grade math and complete the advanced 7th grade math course. Seventh graders skip PreAlgebra and take high school level Algebra 1 Honors. Eighth graders take high school level Geometry Honors, giving our students two high school credits in math while they are still in middle school.

The high school standards for Algebra emphasize performing operations with radicals and polynomials; understanding linear, quadratic, and exponential functions; solving quadratic equations; and interpreting categorical and numerical data. The high school standards for Geometry focus on proving theorems involving two-dimensional figures using Euclidean geometry and coordinate geometry; applying equations of circles in the coordinate plane; and developing an understanding of right triangle trigonometry.

Mathematics instruction is rigorous, using a gradual release method to ensure understanding. Teachers foster a growth mindset and develop perseverance by choosing rigorous and challenging tasks that allow their students to make connections between concepts and representations. Students participate actively in their learning, developing their ability to analyze and problem solve by taking notes and responding to discussions. Visitors may see students getting instant feedback from online review games such as Blooket or Gimkit, or hear students discussing the lesson and problem-solving strategies in small groups. Students analyze their work to improve their efficiency and accuracy in computations. In addition, students develop critical soft skills needed for success in college and careers through discussions that reflect on the mathematical thinking of others, developing their ability to justify methods and construct relationships between their current understandings and more sophisticated ways of thinking.

Formative assessments allow teachers to fluidly adjust lessons to cement student knowledge. Teachers use a variety of instructional strategies including math note-taking, use of mathematics vocabulary, teacher modeling and demonstration, student-led demonstration, and individual practice to solidify the skills and allow the teacher to check for understanding and mastery. Bellwork reviews previous skills and helps students recall information that is relevant to the day's lesson. While reviewing the bellwork with the class, the teacher is gauging student recollection and application. Homework review allows students to ask questions and confirm their accuracy. Interactive lessons provide another opportunity to assess student understanding as they respond during the 'we do' phase and ask questions during the 'I do' portion. A confidence check-in helps determine if students need clarification, more practice, or are ready for a quick quiz.

Data from the FAST Progress Monitoring assessments informs instructional practices.

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

The science curriculum at the STEMM Academy follows Florida's Next Generation Sunshine State Standards (NGSSS) for science. These standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our students need for success in college and careers, and helping students become life-long learners who grow in their understanding of the world.

Our science curriculum begins in 6th grade when our students earn their first high school credit in Earth Space Science. In 7th grade, students move on to Life Science, with content including cells, the life cycle, genes, sexual and asexual reproduction, energy flow in ecosystems, and the interdependence of ecosystems. In 8th grade, students earn another high school credit in Physical Science. They investigate the introductory concepts of physics and chemistry, exploring forms of energy, chemical interactions, dynamics, and the periodic table.

Our teachers design lessons that keep students engaged in active learning by making real-world connections of scientific topics that are interconnected and multifaceted. Hands-on lab experiences lead our students to become curious thinkers through problem solving, discovery, and exploration. Gizmos and PhEt online simulations are used as tools to visualize abstract concepts. Through collaborative small group learning,

students not only improve their understanding of the science content but also develop important skills in communication, collaboration, and inquiry. Teachers regularly assess student learning through formative and summative assessments, including data from the online Study Island platform.

All of our students complete a science and engineering fair research project each year. These independent projects give students the opportunity to expand their skills in scientific explanations, methods, and critical thinking. A technology-rich environment allows students to experiment with the wind tunnel, spectrometers, microscopes, pH meters, and other equipment. Many of our students go on to win awards at the regional and state science fairs.

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

Our rigorous social studies curriculum develops students who are becoming active, informed, and responsible citizens, understanding how they can make the changes they want to see in the world. Our students are college and career ready because they engage with complex historical texts, defending their thinking using evidence from their sources. They develop civic competence by thinking critically about social issues and respect different viewpoints as they think deeply about the past.

Our students study World History in 6th grade, expanding their knowledge of the ancient world. In 7th grade Civics, students learn how the US Constitution serves as a "living document" that guides our government. Students study United States history from colonization to reconstruction after the Civil War in 8th grade, learning about the historical and political events which influenced the development of our country.

Teachers use projects, Document Based Questioning (DBQs), Socratic Seminars, debates, guest speakers, and peer-to-peer collaborative work. Teachers provide scaffolding, spiraling, and support to reteach skills so students can be successful. Our students are continually near 100% proficient on the End-of-Course (EOC) assessment that measures performance on the state standards. Teachers analyze EOC data to identify standards of focus. Teachers incorporate standards across multiple disciplines. For example, our CTE students are programming a battlefield simulation to represent information they have learned in their history classes, coding the program to see how history could be changed if leaders made different battlefield decisions.

We are the only school in our district implementing the National History Day (NHD) program. NHD teaches critical thinking, writing, and research skills while deepening subject knowledge. Students analyze primary and secondary sources to conduct meaningful, self-directed research based on NHD's chosen theme. They interpret the information they have gathered to make an original claim. They synthesize and express their findings in a paper, exhibit, performance, documentary, or website. Many projects go on to be finalists at the state level.

1e. For schools that serve grades 7-12:

Our school's vision is to "train the next generation of STEMM leaders to actively investigate, to question current practice, and to design new solutions to local and global problems." In pursuit of this vision, students are offered advanced coursework and a plethora of electives in several Career and Technical Education (CTE) fields to develop and spark their interests in a variety of careers. Our students are required to take at least one CTE elective each year. Elective offerings are adjusted and updated based on emerging industry trends.

Our CTE electives are clustered into three general tracks. The Artificial Intelligence progression encompasses the fundamentals of 3D printing, the design process, and robotics, culminating in an introduction to Python programming. The Cybersecurity progression introduces students to the fundamentals of networking, information support, and information technology. The STEM Exploration progression explores technical design, aerospace engineering, and maritime technology.

Students earn high school credit while they are still in middle school through our Foundations of Web Design, Python / Advanced Information Technology, and Digital Information Technology courses. Students

have numerous opportunities to earn either industry certification or Digital Tools certification by demonstrating mastery of technical skills such as coding, cybersecurity, web design, and Python programming. Currently, over half of STEMM's students have earned one or more ICT (Information and Communication Technology) and Microsoft industry certifications, including Web Design Essentials, Computing Essentials, Programming and Logic Essentials, and Introduction to Programming Using HTML5 and CSS.

Our CTE teachers embed real world problem solving strategies to prepare for jobs of the future. Teachers have developed a curriculum that promotes creative and innovative thinking, collaboration, critical thinking, and problem solving skills. Students engage in CTE activities through elective coursework, core coursework, First Lego League (FLL) club, First Tech Challenge (FTC) club, and Drone Team Challenge. Students are connected to industry partners through guest speakers, industry mentors, and field experiences.

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

The STEMM Academy serves as a hub school for OCSD's (Okaloosa County School District) central zone for prekindergarten students with disabilities (PreKD) and voluntary prekindergarten (VPK) students. Our Little Stingers Program consists of voluntary prekindergarten (VPK), prekindergarten for students with disabilities (PreKD), and Community Classrooms which are a blend of VPK and PreKD students. The Community Classroom prepares both VPK and PreKD students for kindergarten in a diverse environment. Our PreKD students are three- and four-year old children who may have developmental delays, speech and/or language delays, vision or hearing concerns, medical and/or physical concerns, and social and/or emotional delays. Students are identified through Child Find, a function of the Florida Diagnostic and Learning Resources System (FDLRS). Child Find locates children who are potentially eligible for services under the Individuals with Disabilities Education Act (IDEA).

Our teachers strive to create positive nurturing environments for children to reach their full potential. Their goal is to partner with families to shape the emotional and intellectual development of children with varying abilities in a developmentally appropriate environment that fosters individuality, develops creativity, and respects diversity. Our PreKD students receive individualized instruction to meet their Individualized Education Program (IEP) goals. For those who qualify, we have speech, interpretive services for the hearing impaired, vision impaired services, occupational therapy, and physical therapy available. Resource teachers provide supplemental instruction and oversight for hearing impaired and vision impaired students.

Our Little Stingers learn basic literacy and math skills along with social skills using the Creative Curriculum for Preschool program, which is based on the Florida Early Learning and Development Standards Birth to Kindergarten. The standards and benchmarks address eight early learning domains reflecting a child's expected typically developing progress—physical development, approaches to learning, social and emotional development, language and literacy, mathematical thinking, scientific inquiry, social studies and creative expression through the arts. These Early Learning standards are aligned to the BEST standards for kindergarten, allowing for a seamless transition.

The STAR Early Literacy assessment is used for progress monitoring in the VPK and Community classrooms. Results demonstrate that students are making gains consistent with their general education peers.

Our PreKD students are ready for the regular primary grade classrooms, with over 80% transitioning from a special education classroom into a regular general education class at their attendance zone school when they reach kindergarten age.

2. Other Curriculum Areas:

2a. Arts (visual and/or performing)

In our Introduction to Arts A/V Technology course, students explore the elements of design and use a variety of media to explore individual expression. They apply their artistic talent to practical problems and learn visual arts principles. Students in grades 6 through 8 can also stretch their creativity in our Digital Arts course, where they learn techniques and applications of digital imaging to create original work using computers, digital cameras, photo editing software, and drawing software.

Our Speech and Debate course provides students in grades 6 through 8 with an avenue for the performing arts. Students learn and practice a variety of speech formats. They have the opportunity to speak at public events and to participate in speech contests. One fun project has them doing a dramatic reading of a children's book to the preschool classes.

The Odyssey of the Mind (OM) team is also an outlet for the performing arts. This international program, open to all students, emphasizes teamwork, time management, and public speaking. The OM team selects one of five Long Term Problems from the annual OM competition. They spend weeks creating and developing their original solution which will be presented in a live performance. OM members learn self-confidence and problem solving that will benefit them in college and in future careers.

2b. Physical education/health/nutrition

As a STEM-focused school, the majority of our students are lovable geeks who prefer to sit behind their computer all day. We believe, however, in strengthening both the mind and body. Our students work hard in their classes, so we give fitness breaks during the day to get them re-energized. Teachers give frequent movement breaks, taking their classes for spontaneous walks around the track or for a free play recess time outside when classroom energy falters. During lunch, students can play cornhole, bocce, yard dice, and other activities, spending quality time with their peers while they work on gross motor skills.

All of our students can take Physical Education (PE) as an elective course. In PE, students acquire skills that improve sports skills, strength, stamina, flexibility, and health. Group PE activities develop students' sportsmanship, teamwork, and confidence along with their physical fitness.

We participate in the district's Healthy Schools initiative, which promotes wellness and nutrition education to promote lifelong healthy habits. Partnering with the Department of Health, students improve their health and well-being by increasing their knowledge of the aspects of a healthy lifestyle. The Healthy School Team advocates for policies and practices that allow students, teachers, and staff to learn and work in a healthy school environment.

Our PreK students work diligently over the course of the 2nd semester to prepare for our Special Olympics in the spring. Teachers, support personnel, volunteers, and mentors work together to support students in physical challenges individually and as teams.

2c. Foreign language(s), if offered (if not offered, leave blank)

No students currently enrolled.

2d. Technology/library/media

Our middle schoolers have a myriad of opportunities in technology. As a STEM-focused school, they are required to take one CTE elective each year. We offer courses in Python coding language, cybersecurity, networking, aerospace engineering, and technical design. Students earn high school credit in Foundations of Web Design, Python/Advanced Information Technology, and Digital Information Technology courses.

Extracurricular teams including First Lego League (FLL) club, First Tech Challenge (FTC) club, and Drone Team Challenge give our students the chance to interact with technology in a competitive setting. In FLL, students engage in problem-solving, coding, and engineering to build and program a LEGO robot that navigates predefined missions. In Drone Team competitions, students navigate a drone through an obstacle course, practicing their hands on piloting skills with the goal of being the team that most quickly navigates

timed gates. Even though awards are given, the competitions are treated as an opportunity for growth and fun.

In our Maker Space, students can use the 3D printers to experiment with digital design. They can use the Cricut electronic cutting machines to cut out designs for their science fair and other projects boards. We also have a laser cutting machine, a CNC router, and other equipment to support students with their project based learning.

Our students have a deep thirst for knowledge and have broad interests. This year, we developed a library where students may check out books and engage in reading clubs. Our media specialist provides a rich literary experience for our PreK students where she reads, assists students with projects aligned to the story, and encourages students to check out books on their own. Our library is still evolving with students, teachers, and stakeholder input to best meet the needs of our unique populations.

2e. Any other interesting or innovative curriculum programs you would like to share

The STEMM Academy offers several research courses unique to our school. These courses enable our students to develop their proficiency in the research process with an emphasis on appropriate research design.

Our BioMed and Forensics Research course offers our students one semester of biomedical investigations and one semester of forensic investigation techniques. The content includes the research process; forensic investigation techniques and case studies; lab experiments testing functions and structures of the human anatomy with the use of medical equipment such as stethoscopes, lung bags, and pulse oximeters; and research projects on various disorders and diseases and medical career fields.

To appeal to our creative, inquisitive science students we offer a Science Fair Research course. The program provides an opportunity to acquire skills and concepts inherent in the science research experience. Students experience science through original research, practice scientific thinking, and learn scientific processes. The course supports students in the Science Fair process by developing basic knowledge and skills in the research process with emphasis on determining and refining research questions.

Our newest elective is Field Research where students receive training in field survey, remote sensing, and investigations and assessments of data collection. A major emphasis is placed on students going out into the field to collect and study local samples. Students engage in data science including hands-on data collection through field research and utilizing technologies to collect and analyze data. Students engage in individual and group projects, strategic thinking, problem solving, creativity, research, and presentations.

3. Academic Supports

3a. Students performing below grade level:

The STEMM Academy does not have an attendance zone. Instead, due to the rigor of the curriculum and the high school level classes offered beginning in 6th grade, we admit students who score in the upper quintile in math and ELA. If you look only at standardized test data, none of our students are performing below grade level in either ELA or mathematics. In reality, we do have some students who have difficulty in rising to the challenge of the rigorous curriculum.

To make sure all students are succeeding, advisory teachers do biweekly grade checks and conference with students who have multiple missing assignments in any of their classes. The counselor monitors grades each week to identify students who have Ds or Fs in any class. Grade level teachers meet monthly to discuss struggling students and identify and implement actions needed to support students.

Led by the counselor, the Multi Tiered System of Supports (MTSS) Team meets regularly. The MTSS Team makes decisions and plans interventions for students who need additional support. The MTSS Team also reviews FAST progress monitoring data, attendance, and discipline to monitor progress and trends.

The rapid acceleration in math poses unique challenges to students and teachers. Math teachers at the STEMM Academy offer additional layers of support for students who need extra help. Students are encouraged to attend tutoring sessions after school or on weekends. Our 6th grade students attend a summer mathematics boot camp that prepares them to skip ahead to the 7th Grade Advanced Mathematics course. To prepare for this camp, our teacher compares the 6th grade BEST Standards to the 7th grade standards. These foundational skills were developed into lessons and practice.

3b. Students performing above grade level:

As a school without an attendance zone, our students are selected for admission based on demonstration of exceptional promise in science and math evidenced by their standardized test scores. While around 24% of our students are identified as gifted, all of our students are high-performing. Our students take honors courses, are accelerated a year in math, and earn high school credits in middle school.

As a school made up of high-performing students, our instructional approaches and interventions are designed to maintain a high level of achievement. With many students performing above grade level, our teachers focus on providing instruction that leads to academic gains. Students engage in Socratic seminar style discussions, supporting and critiquing each other's responses. Students work collaboratively to bounce ideas off of each other, and teachers prompt students to extend their initial answers, encouraging students to give the best response. Synthesizing and elaborating is an expectation across all content areas. Rather than just identifying evidence, students are synthesizing and making connections to prior knowledge and experiences, which deepens everyone's understanding.

Our teachers design instruction to keep our highest achieving students engaged. Our students deepen their learning through collaborative hands-on learning such as their National History Day research projects and high level science fair research projects to become critical thinkers and effective real-world problem solvers. Whether it's in the Maker Space, the 3D Printer lab, or the classroom, students build, create, and investigate real-world problems. In addition, professionals in the STEM community serve as mentors and guest speakers, and host students through a variety of field experiences.Our mentors come from the Air Force Research Lab, the Hsu Foundation, the University of West Florida, Northwest Florida State College, and other local STEM businesses.

We continue to meet high standards through analysis of student performance based on data collected from state assessments along with classroom formative and summative assessments.

3c. Students with disabilities:

The STEMM Academy provides multiple supports for students with disabilities. For our middle school students, our daily schedule is deliberately crafted to provide a daily advisory period. This advisory class provides a "home base" where students have a consistent adult who provides encouragement and support. Advisory teachers do regular check-ins for students who are struggling academically, socially, or emotionally. Our teachers provide after school tutoring three days a week to assist any students who need additional support.

At both the PreK and the middle school level, students are provided speech therapy, interpretive services for the hearing impaired, vision impaired services, occupational therapy, and physical therapy. Resource teachers provide supplemental instruction and oversight for students with visual and hearing impairments. Students with visual impairments and student with hearing impairments are provided assistive technology tools that allow them to fully access and participate in the curriculum. Our PreK students with disabilities receive individualized instruction to meet their IEP goals.

Approximately 30 middle school students have a Section 504 plan that outlines the specific accommodations to help students realize their goals and maximize their potential.

Our MTSS team develops interventions to support students' learning. The team meets to establish an accurate picture of the student's needs and the types of support necessary to meet those individual needs.

3d. English Language Learners:

No students currently enrolled

3e. Other populations, if a special program or intervention is offered:

PART V – SCHOOL CLIMATE AND CULTURE

1. Engaging Students:

Our principal ends her announcements each morning saying, "Work hard, be kind, have fun, and lift one another. I love you all." The things that happen on campus each day bring this motto to life.

Work hard. As a high performing school, our students work hard, engaged in relevant and rigorous curriculum. Our program enables students to transition to high school having completed high school courses including Algebra I Honors, Geometry I Honors, Physical Science Honors, Earth Space Science Honors, and Fundamentals of Web Design. Through our myriad CTE courses, students can earn adult ICT and Microsoft industry certifications.

Be kind. When new students join the STEMM Academy, Student 2 Student (S2S) Ambassadors provide a welcoming face to ease the stress of joining a new community. On the new student's first day on campus, an S2S Ambassador is assigned as a mentor to greet them in the morning, help them find their new classes, and be a buddy at lunch. S2S Ambassadors check in with the new student regularly during the first weeks to assure that the new student is adjusting to their new school.

Have fun. Students can have fun in extracurricular clubs based on a variety of interests such as Soccer, Environmental, Art, Disc Golf, Photography, Philosophy, and Anime. Our Drone, FIRST Lego League, Academic, and Odyssey of the Mind teams give our students the chance to show their competitive side. Our leadership clubs–National Junior Honor Society, Student Council, and Multicultural Council–lead service projects that give back to the community. Special events like the paper airplane contest, Rubik's cube contest, Genius Hour, and a visit from Santa help relieve stress.

Lift one another. Our schedule is deliberately crafted to include a daily advisory time. Since our students go to classes on alternating A and B days, this daily advisory time gives students a sense of continuity and a "home base." Daily advisory time allows students to build a deeper relationship with at least one caring adult in the building who encourages and supports them academically, socially, and emotionally. Teachers give students positive recognition through our SOAR point system, which sends a positive email to their parents. Our monthly Stinger Spirit Awards recognize those who exemplify our core values.

I love you all. STEMM is a small school with a small staff. As a result, the teachers and staff know every student, whether they are in their class or not. Our teachers deliberately work to develop a safe classroom environment, focused on learning, where all students can thrive.

2. Engaging Families and Community:

The STEMM Academy builds positive relationships with families by providing ways they can become involved in their child's education. For example, we host parent nights, a high school information night, and a "Becoming a Stinger" event for prospective students and their families. The School Advisory Council (SAC) is a team of people representing various segments of our schools community--parents, teachers, students, administrators, support staff, and community business partners. STEMM's SAC provides the opportunity for school stakeholders to assist in improving our school. The SAC assists in the preparation and evaluation of the School Performance Plan (SPP), and may also assist the principal with the annual school budget. The SAC reviews relevant data, identifies problem areas, and develops improvement strategies, and monitors their implementation. Our small but active Parent Teacher Organization (PTO) provides support for students by hosting school dances, running the school store and the used uniform sales, and providing funding for special events, awards, and school teams.

We have developed partnerships with many community organizations. Local businesses support our program through financial support, guest speakers, field trips, and volunteer support. Our principal is on the local advisory board for Artificial Intelligence, Machine Learning, Python Programming, and Data Science (AMPD), where school and district leaders, educators, and local experts meet to share industry trends,

school needs, and community supports aligned to the STEM mission. Crosspoint Church, the Air Force Research Lab (AFRL), Choctawhatchee Basin Alliance, and the University of West Florida are a few of the local organizations that support our programs not only financially but also with their time, energy, and talents. For example, AFRL provides generous grant funding that supports many of our innovative programs such as the guitar project used in the Exploring Technical Design course. Students learn how to build their own custom electric guitars, a tangible item that reinforces STEM concepts in a way that mere pencil and paper assignments can not.

Okaloosa County School District educates the highest percentage of military students of any county in the state of Florida. As a Purple Star School of Distinction, we recognize the unique educational and socio-emotional challenges military-connected children face during their transition to a new school. We support students as they relocate to new schools due to a parent's change in duty station. Professional development is provided annually to staff concerning how to identify and respond to the needs of military students and their families. We recognize our military families by highlighting annual military recognition events including Month of the Military Child, Purple-Up! for Military Kids, Veterans Day and Memorial Day.

3. Creating Professional Culture:

Our mantra is "we all rise when we life one another". A high quality academic program requires a high quality staff. A high quality staff is built upon continuous improvement and a growth mindset. In order to ensure that all students can learn at high levels, adults must also grow and improve. Our STEMM staff support each others' efforts to try new things. John Hattie's research shows that building collective efficacy and teacher credibility improves student achievement. Collective efficacy refers to the shared belief that through their collective action, educators can influence student outcomes and increase achievement for all students (Donohoo 2017). With an effect size of d=1.57, collective teacher efficacy is strongly correlated with student achievement. Teachers develop the mindset that these are "our" students, not just "my" students. They step in to help, covering classes as needed, and volunteer their time to sponsor extracurricular clubs after school.

Collaboration and cross-curricular activities are the norm. Regular team meetings and department meetings allow for vertical and horizontal alignment. Common planning time gives teachers opportunities to share best practices. Frequent team meetings and reflections are occasions to celebrate each others' efforts in increasing student achievement.

Teachers feel valued and supported through many school initiatives. The administration recognizes teachers' accomplishments by awarding monthly Teamwork and Growth Mindset awards. The entire staff has a monthly First Friday event, to allow everyone to socialize and build relationships. The PTO pampers our teachers with quarterly luncheons.

Both district-provided and school-based professional development is provided to ensure delivery of a high quality program that implements research-based strategies to ensure gains and growth for all students.

School-based professional development is based on data that identifies school, department, or individual needs. Teachers participate in Tech Tuesday workshops to build skills with Google Classroom, Canvas, Focus student information system, and NetSupport. We do two semester-long book studies each year based on interests and needs. This semester, we are exploring Teach Like A Champion to build techniques that raise academic expectations, increase the ratio of the cognitive work students do, and motivate and engage students. We also promote and support attendance at national conferences applicable to teachers' specialty areas. Our school's New Teacher Training gives beginning teachers support with classroom management, technology integration, teacher clarity, and high effect size teaching practices identified by John Hattie's Visible Learning research.

4. School Leadership:

Our school's leadership philosophy is student-centered and built on a growth mindset. All decisions are made through the lens of doing what's best for our students. The principal is an instructional leader who

works with teachers, students, and stakeholders to bring the STEMM Academy's mission and vision to life. The principal encourages teachers, in turn, to instill the mission and vision in their classrooms. The principal mentors grade and department chairs to build leadership capacity and increase ownership in school-wide decisions.

The school Administrative Team, consisting of the principal, the dean of students, and the school counselor, makes decisions for the school as a whole. The Administrative Team meets weekly to review priorities and goals, students' academic success, behavioral trends, safety plans, data involving school programs, and special events. All voices are heard and revisions are made as needed. The principal, dean, and counselor are in constant communication for consistent school operation.

Each member of the school administration has key responsibility areas. The principal is responsible for the budget, crisis management, hiring personnel, curriculum oversight, and data team facilitator. The dean's responsibilities include scheduling, discipline, technology management, communications, social media. The counselor serves as the school's testing coordinator, MTSS leader, attendance monitor, and volunteer coordinator.

The School Leadership Team, composed of the grade level and department chairs, the principal, the dean, and the counselor makes decisions for each grade level and department. The School Leadership Team meets monthly to look at schoolwide formative assessment data, discuss priorities and goals, review procedures, and discuss needs. At the classroom level, department and grade level teams meet to analyze student work and performance data, conduct peer observations, and formulate next steps to increase student achievement.

The principal, having recently earned her doctorate in education, aims to stay abreast of the latest research in education. Attending national conferences, networking with other school leaders and professionals, reading professional literature, and engaging in podcasts are part of the principal's regular routines. A collaborative, multi-tiered approach to leadership and decision-making has been deliberately established and continues to evolve.

5. Culturally Responsive Teaching and Learning:

Maintaining a positive school culture that embraces inclusion, empathy, and kindness is a daily focus. Our conscious and unconscious perspectives are examined and experiences are shared to ensure everyone feels respected, appreciated, and physically and emotionally safe. Faculty provide culturally responsive teaching by holding all students to a high academic standard. All students, regardless of background or socioeconomic status, have access to all the learning opportunities STEMM offers. Classrooms are set up for collaborative work, enabling students to work with peers from diverse backgrounds. As their positions in the group change, students learn how to appreciate diverse viewpoints.

Backgrounds, holidays, and traditions are recognized and respected. Recently our school started a Multicultural Council. The goal of this student-driven club is to embrace diversity and to develop an awareness and appreciation of diverse cultures.

Believing that "Every day is Kindness Day," students learn to build relationships with others, reach out to those who need support, and to help others feel accepted and included. In advisory classes, students have frequent discussions of acceptance of one's unique self and the dynamic differences of others with similar basic traits. Students recognize strengths, positive qualities, and character traits in themselves and others, creating a safe and respectful classroom environment, and learning to appreciate the diversity their peers bring. Faculty create classroom lessons that incorporate learning with shared experiences. As the students interact, relationships are formed, characterized by trust and openness.

Our Hope Squad is a school-based peer support team. Squad members, selected by their peers for being trustworthy and caring, are trained to watch for at-risk students, to recognize the signs that a peer is struggling, and refer the student to a trusted adult. Squad members are trained in suicide prevention, resilience, and anti-bullying. Our Hope Squad members and S2S Ambassadors practice being friends to all. It's not unusual to see students switching tables in the cafeteria to make sure that no one eats alone.

Students who have declining grades are met with tangible academic support. Communication between the teacher and parent opens the door to adopt a plan of action for student success. When a student has an academic challenge, their temporary mistake that they may perceive as failure is not punished but seen as a growth mindset opportunity to recalibrate their learning strategies to tackle the problem from another angle.

Also, our school supports students who are homeless or in transition. Students are offered support with faculty keeping an eye on them for any emotional needs and providing materials, supplies, and clothing as needed.

PART VI - STRATEGY FOR EXCELLENCE

Maintaining a culture of high engagement with high expectations has been influential in the STEMM Academy's continued success. We have deliberately cultivated and promoted innovative educational strategies and high standards that encourage independent thinking, problem solving, academic risk taking, collaborating, and critical thinking. The administration safeguards instructional time to minimize interruptions.

Environments with high expectations provide "stretch" challenges, spur collaboration, stimulate meaningful contributions, illustrate a consistent standard of excellence, and focus not only on outcomes but also on learning, progress and mastery. Learning, progress and mastery are hallmarks of what Stanford psychologist Carol Dweck calls a "growth mindset." People who exhibit a growth mindset are those who believe abilities can be developed through dedication and hard work. People who exhibit a growth mindset outperform others in goal achievement, learning and overall satisfaction.

Excitement is generated in our classrooms as teachers engage students cognitively in meaningful and relevant learning experiences. Our teachers develop rigorous lessons that go beyond the required curriculum and that challenge students to meet the high expectations we place on them. Our lessons are often interactive and student led, using techniques such as Socratic seminars and reciprocal teaching. Students are encouraged to take responsibility for their own learning, which builds self-esteem and empowers students to take an active role. As they develop a growth mindset, students feel safe to make mistakes. They get feedback from their teachers and peers, make improvements, and try again.

The STEMM Academy believes in moving students from Schlechty's definition of ritual compliance to authentic engagement. When students are cognitively engaged rather than engaged for compliance, their individual roles shift. Rather than engaging because of extrinsic outcomes such as grades, our students move beyond simple "task completion" and self-monitor to ensure high quality work is completed. Fully engaged students see the activity as personally meaningful and worthwhile, and persist in the face of difficulty and put forth greater effort. Our teachers design instruction that maximizes the time students are fully engaged, developing learning tasks that are meaningful to our students. As a result, our students invest time, effort, and attention, persisting when the work becomes challenging. According to Schlechty's research, students who are actively engaged learn at high levels, retain what they learn, and transfer their learning to new contexts.