1.3 Education Plan

14 *Del. C.* §§ 512(4)-(8) and (11)

Curriculum and Instructional Design [14 *Del. C.* § 512(6)]

1. **Provide a synopsis of the proposed educational program ….**
   The Montessori Method of education, developed by Dr. Maria Montessori, is a child-centered educational approach based on scientific observations of children from birth to adulthood. Dr. Montessori's Method has been time-tested, with over 100 years of success in diverse cultures throughout the world. While the Montessori Method is being used in schools on six continents, and in 400 + public schools in the United States it is still considered by most to be an innovative and new approach to public education. Montessori schools are being sought by parents because they are known for their academic rigor while also addressing the development of key skills such as leadership, perseverance, self-efficacy and the ability to work collaboratively among others. These same skills are identified as important to students in Delaware in the Vision 2025 plan for education in Delaware.

   The following are specific characteristics highlighted on the American Montessori Society Website and the National Center of Montessori in the Public Sector outline the key components of the Montessori approach which support an environment that allows for both academic rigor and the personal social and emotional growth of children.

   Curriculum/Instruction:
   - Learning is aligned with a consistent coherent interdisciplinary curriculum.
   - The Montessori curriculum is carefully structured and integrated to demonstrate the connections among the different subject areas focusing on critical thinking, innovation, and communication skills.
   - A full complement of Montessori learning materials is meticulously arranged and available for use in an aesthetically pleasing environment.
   - Learning takes place through manipulating materials and interacting with others. These meaningful experiences are precursors to the abstract understanding of ideas.
   - Children experience sensitive periods, or windows of opportunity, as they grow; teachers match appropriate lessons and materials to these sensitive periods.
   - The physical, emotional, social, aesthetic, and cognitive needs and interests of the learner are inseparable and equally important.
   - Elementary students organize thinking through the Montessori materials and an interdisciplinary curriculum passing from the concrete to the abstract. Students apply knowledge to real-world experiences.

   Environment:
   - Montessori schools are based on the premise that children are naturally eager for knowledge and capable of initiating learning in a supportive, thoughtfully prepared learning environment.

- Multiage groupings are a hallmark of the Montessori Method: younger children learn from older children; older children reinforce their learning by teaching concepts they have already mastered mirroring the real world
- The teacher, child, and environment create a learning triangle. The classroom is prepared by the teacher to encourage independence, freedom within limits, and a sense of order. The child, through individual choice, makes use of what the environment offers interacting with the teacher for support or guidance as needed.
- Montessori schools are warm, supportive communities of students, teachers, and parents. Montessori education consciously teaches children to be kind and peaceful.
- Students in Montessori schools are encouraged to learn from their mistakes. It is this environment that promotes inquisitiveness and innovative thinking.
- Montessori students learn to collaborate and work together in learning and on major projects. They strive for their personal best.

REFERENCES
American Montessori Society Website; Retrieved from https://amshq.org/Montessori-Education/Introduction-to-Montessori .
National Center for Montessori in the Public Center Website; Retrieved from http://www.public-montessori.org/what-public-montessori .

2. **Provide a synopsis of how the proposed instructional design reflects the needs of the school's target population ….**
.
The Common Core Standards and Delaware Content Standards align well with the Montessori instructional approach. For example, the standards emphasize the importance of moving from concrete to abstract understanding and the spiral approach in which concepts are revisited in increasingly greater depth. They continually stress the conceptual understanding of key ideas and return to key organizing principles and procedural skills that structure those ideas. Each of the procedural skills are addressed in Montessori materials such as the Ten Bead Bars, the Short Bead Stair, the Tens Board, and the Golden Beads, the Moveable Alphabet, the Sandpaper Letters, to name a few (Montessori Compass).

Specifically, the following are ways that ensure that all children are academically and socially successful in a Montessori classroom:
- Mixed age groups require a full array of materials at different levels for all children making instruction easy to differentiate.
- The entire approach is one of small group and one-on-one work accommodating individual children.
- Uninterrupted 3-hour work periods allow students to persevere with a task, reduce transitions, and allow for the easy integration of support services in the classroom.
- Montessori Materials support moving from the concrete to the abstract aiding many children who are not yet ready for the abstraction of paper and pencil concepts.

- All students learn from each other and learn to see differences and individual needs as a normal part of classroom life.
- ELL children work in small groups with typically developing students and native English speakers.
- As children are taught to navigate the independence of a Montessori classroom they increase their sense of success and sense of self-efficacy.
- The Montessori teacher is continually observing and assessing children's progress. They routinely evaluate and reflect on individual children's progress adapting the classroom environment and materials to ensure that each child is successful.

There is increasing evidence that students similar to those in Western Sussex County excel in Montessori School environments. Please see specifics in the Research Section below.

References:
East Dallas Community Schools Summer Newsletter (2010); Retrieved from:
http://www.publicmontessori.org/sites/default/files/resources/EDCS%20Outcomes%20Charts%20and%20Graphs.pdf
Montessori Compass: Retrieved from http://montessoricompass.com/blog/common-core-standards-an-opportunity-for-montessori-to-shine
National Center for Montessori in the Public Center Website; Retrieved from
http://www.public-montessori.org/what-public-montessori

a. **The description of the instructional design should include ….**
The Mission of the SMS is to nurture the development of empathetic, collaborative, persistent and innovative global and community leaders in accordance with the time-tested philosophy of Maria Montessori. The Montessori approach dates back to 1907, when Dr. Montessori opened the Casa dei Bambini, or Children's House, in a low-income district of Rome. Her unique philosophy sparked the interest of educators worldwide. A century later, there are more than 5,000 private, 500 + public and charter Montessori schools in the United States, and over 22,000 worldwide. Maria Montessori based her educational methods on scientific observation of children's learning processes, from birth through adulthood. Guided by her discovery that children teach themselves, Dr. Montessori designed a "prepared environment" (classroom) in which children could freely choose from a number of developmentally appropriate activities.

The strength of Montessori Schools is that they encompass the components of personalized learning and of classrooms that support creativity and innovation. Montessori trained teachers understand how to support children's personalized learning. Kristen Vogt (2016) on The Next Gen learning website and Carri Schneider (2012) provide research and explanations of how Montessori is connected to personalized learning. The following are a few highlights from this work:

- <u>Student grouping that is dynamic, flexible, and responsive to student needs and based on data</u>. In Montessori classrooms, teachers continually observe students and serve as a resource to assist them in making a constructive connection with the environment, with

others in the classroom, and to show them how to use the materials that form the curriculum in the Montessori classroom. Observing to inform instructional decisions that are responsive to children's needs is the heart of personalized learning.

The multiage classrooms typically are comprised of 24 to 26 children across two to three grade spans. Sussex Montessori will have a lead Montessori and State Certified teacher in each classroom as well as an assistant teacher. This structure allows for children to get the appropriate support from the adults in the classroom while maximizing the opportunity for children to learn and work collaboratively.

- <u>Students have learning space that supports personalized learning</u>. Teachers provide environments where students have the freedom and the tools to pursue answers to their own questions while continually building their knowledge base in a variety of subject areas. Early access and instruction in the use of research tools broaden the possibilities for self-learning. A key premise of the Montessori approach is that knowledge is constructed from experience rather than delivered in a teacher centered classroom. The role of the teacher is to prepare an environment where children can access materials and opportunities to construct their understanding. Montessori students enjoy freedom within limits. Working within parameters set by their teachers, students are active participants in deciding what their focus of learning will be. They are free to advance through the curriculum at their pace guided by the teacher and an individualized learning plan. This develops internal satisfaction that drives the child's curiosity and interest and results in joyous learning that is sustainable over a lifetime.

- <u>Students discuss data and receive continual feedback.</u> In Montessori classrooms students focus on their personalized best. They learn to reflect on their own learning, their own products, and to determine their next steps. Montessori students use this data with their teachers to set personalized learning goals and work plans for the week. Montessori lessons are set up to give students the chance to learn from mistakes in real-time and to self-check their progress as they work alone or with peers.

  Self-correction and self-assessment are an integral part of the Montessori classroom approach. Students learn to look critically at their work, and become adept at recognizing, correcting, and learning from their errors. They become comfortable providing constructive feedback to peers to work out social and academic problems.

- <u>Competency Based Learning.</u> Montessori teachers provide lessons with materials that induvial learners demonstrate that they are ready for. This readiness is the result of mastering a material that develops a concept that is required for mastering the next material in the sequence. Montessori classrooms provide for exploration of abstract concepts through carefully sequenced concrete materials designed to support the move to abstract thinking. The materials are hierarchical and recursive. This is the heart of competency based learning. Learning is student centered and motivation is high.

- <u>Hands on Didactic learning.</u> Unlike competency based learning in schools relying on technology as a delivery model, Montessori classrooms actively engage children in learning using their hands to manipulate materials.

- <u>Technology</u> is not the tool for personalized learning in Montessori schools; personalization is created by the teacher, the children and the classroom environment. Technology is viewed as a tool to access information, construct knowledge, and to organize and communicate ideas. Montessori classrooms are ideally suited to support the goals of the International Society of Technology in Education including the following: *empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator* and *global collaborator*. Montessori students have ongoing access to technology to access information, communicate with others, and to develop new ideas. Coding, digital video, blogging, digital products and digital communication are all easily integrated into the classroom allowing students to participate as a global collaborator and digital citizen with others around the globe. The teachers at SMS will receive support in learning to integrate technology within the curriculum to support students effective use of it as described above.

  Many of these characteristics of personalized learning are identified by Karla Adams (2005) in her research on schools that support creativity and innovation. Montessori schools embody all the components of schools that support the development of innovation and creativity. Specifically, they:
  - create communities of learners,
  - emphasize intrinsic motivation,
  - focus on "what did you learn" and not "how did you do" – one's personal best,
  - support interdisciplinary connections across big ideas and essential questions,
  - provide predictability and choice; safe places for children to explore and learn from mistakes, and
  - foster self-efficacy through the teacher's belief that all children are capable and a classroom culture that supports peers in this same belief about each other.
  - focus on the role of the teacher as a guide or facilitator.

  This focus leads to the mission of SMS which is the development of empathetic, collaborative, persistent and innovative global and community leaders. In addition, the Montessori Classroom directly leads to the outcome of college and career ready children as defined by the Common Core Standards:
  - Demonstrate Independence; demonstrated through Montessori's activities in self-choice, open exploration and self-correcting concrete materials.
  - Build strong content knowledge across a wide range of subject matter; demonstrated through the daily choice of activities in practical life, sensory-motor, mathematics, language, science, culture, art, and music as well as through social interactions in a multi-age group setting.

- Respond to varying demands of audience, task, purpose, and discipline through adaptive communication skills; demonstrated in Montessori's classroom structure through multi-age groupings, conflict resolution, peer mediation, cultural awareness and sensitivity, and early research.
- Ability to comprehend as well as critique; fostered in the classroom community as children demonstrate their understanding of the Montessori materials, teach others how to use a material, and work together to challenge each other to do their personal best.
- Value evidence; demonstrated through the continual focus on "what did you learn", using evidence to justify one's thinking, and the focus on self-assessment.
- Use technology and digital media strategically and capably: as demonstrated through early access to research tools and encouraged problem-solving strategies.
- Come to understand other perspectives and cultures: as demonstrated through early conflict resolution, a deep focus in the curriculum on culture and how culture impacts the way people participate in the global community.

Adams, K. (2005). "Sources of innovation and creativity". A paper commissioned by the National Center on Education and the Economy. Accessed 10/26/2011 at http://www.fpspi.org/Pdf/InnovCreativity.pdf .

Schneider, C. (2012) 5 Characteristics Connecting Montessori Ed & the Personalized Learning Movement. Retrieved from http://www.gettingSMSrt.com/2012/05/5-characteristics-connecting-montessori-ed-the-digital-learning-movement/.

Vogt, K. (2016) 3 Must-Use Practices in Successful Personalized Learning Schools. Retrieved from http://nextgenlearning.org/blog/3-must-use-practices-successful-personalized-learning-schools .

b. **Present evidence that the proposed educational program is research-based and has been or will be rigorous, engaging, and effective ….**

There are about 500 Montessori schools in the U.S. (more than 500 of them public schools) and 20,000 in the world (North American Montessori Teachers' Association; American Montessori Society, retrieved December 4, 2016) providing substantial evidence—and demonstrated in academic research—that Montessori schools are highly effective.

A rigorous school, offering rigorous instruction, is defined as an institution "creating an environment in which each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each student demonstrates learning at high levels (Blackburn, 2008)" (Blackburn & Williamson, 2013). To achieve rigor requires a thoughtful engineering of the classroom environment that values learning (Williamson & Blackburn, 2010) by encouraging exploration, individualized learning, and engagement—a hallmark of Montessori education. Montessori classrooms provide students with both shared/common project-based learning experiences, as well as individualized "work" that has been assigned according to students' current academic levels. Each student is provided with rigorous individualized instruction, guidance, and interventions that push them toward acquiring essential content knowledge as well as a development of critical thinking/problem solving skills.

The Montessori approach holds students to high standards and motivates them to *engage* in material, concepts, and the learning environment in new ways. The Great Schools Partnership (2016) defines student engagement as "the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education. Generally speaking, the concept of 'student engagement' is predicated on the belief that learning improves when students are inquisitive, interested, or inspired, and that learning tends to suffer when students are bored, dispassionate, disaffected, or otherwise 'disengaged.'" The U.S. Department of Education (retrieved December 4, 2016) noted, that curricular strategies such as project-based and community-based learning leads to "better student engagement because the content is relevant to each student and tailored to their unique learning needs," and "better student outcomes because the pace of learning is customized to each student." They note, in particular that "transitioning away from seat time, in favor of a structure that creates flexibility, allows students to progress as they demonstrate mastery of academic content." Montessori students rarely receives instruction or work to complete in a traditional "seat time" manner. Rather, as suggested, students are engaged via provocation, project and community-based learning, and an organization of their environment to be active seekers of knowledge, employ self-correction and self-assessment, and enlist the collaboration of other students and teachers (American Montessori Society).

As stated above, Montessori education has proven successful in diverse and high poverty communities. Montessori schools—with engagement anchored in rigorous individualized, project and community-based, and inquiry-based learning—establishes a primary culture of high expectations which is "necessary" for academic achievement in high-poverty communities such as Western Sussex (Barth et. al. 1999; Kannapel & Clements, 2005; Ragland et. al., 2002). The following are selected studies (summarized by the National Center for Montessori in the Public Sector: http://www.public-montessori.org/resources/does-it-work-what-research-says-about-montessori-and-student-outcomes) that demonstrate effectiveness in Montessori programs, many in communities similar to Western Sussex:

Dohrmann, K., et. al. (2007), [**"Outcomes for Students in a Montessori Program: A Longitudinal Study of the Experience in the Milwaukee Public Schools,"**] *Journal of Research in Childhood Education,* **22(2), 205-217.**
This longitudinal study of Milwaukee high school graduates showed that students who had attended Montessori preschool and elementary programs significantly outperformed a peer control group on math/science scores. "In essence," the study found, "attending a Montessori program from the approximate ages of three to 11 predicts significantly higher mathematics and science standardized test scores in high school.

[**East Dallas Community Schools: Montessori Outcomes**]
East Dallas Community Schools operates two inner-city Montessori schools that serve an ethnically and culturally diverse group of primarily low-income families. In over 30 years of using the Montessori approach to education, EDCS has proved that all children, regardless of race or

income, can succeed in school when you start young and involve parents.   In a neighborhood in which the high school dropout rate is over 50%, children who attend EDCS have graduated from high school at a rate of 94%, with 88% of those graduates attending college. A ten-year study of standardized test scores found that third grade students' average scores were in the top 36% nationwide in reading and math. Even though many of these children start school without speaking any English, 100% of the children test as fluent in English by the end of the third grade.

Lillard, A. & Else-Quest, N. (Sept. 29, 2006). "Evaluating Montessori Education," *Science* **131: 1893-94.**
Researchers compared Montessori students with students in other school programs, and found that 5-year-old children who completed the three-year cycle in the Montessori preschool program scored higher on both academic and behavioral tests than the control group.   The study also found that 12-year-old Montessori students wrote more sophisticated and creative stories and showed a more highly developed sense of community and social skills than students in other programs.

Lillard, A. (2005). Montessori: The Science Behind the Genius, New York: Oxford UP.
A comprehensive review of the scientific literature that demonstrates how current research validates Dr. Montessori's observations about how children learn, particularly with regard to movement and cognition, the detrimental effect on motivation of extrinsic rewards, the beneficial effect of order in the environment, and the academic and emotional benefits of freedom of choice.

Rathunde, K. (Summer 2003) "A Comparison of Montessori and Traditional Middle Schools: Motivation, Quality of Experience, and Social Context," *The NAMTA Journal* **28.3: pp. 12-52.**
This study compared middle school students in Montessori programs with students in traditional middle schools, and found significantly higher student motivation and socialization among the Montessori students. "There were strong differences suggesting that Montessori students were feeling more active, strong, excited, happy, relaxed, sociable, and proud while engaged in academic work. They were also enjoying themselves more, they were more interested in what they were doing, and they wanted to be doing academic work more than the traditional students."

Diamond, A. & Lee, K., (Aug. 19, 2011). "Interventions Shown to Aid Executive Function Development in Children 4 to 12 Years Old," *Science* **333:959-964.**
To be successful takes creativity, flexibility, self-control, and discipline. Central to all those are executive functions, including mentally playing with ideas, giving a considered rather than a compulsive response, and staying focused. This review compares research results from various activities and curricula that have been shown to improve children's executive function, including computerized training, aerobic exercise, martial arts and mindfulness practices, and classroom curricula including Montessori education. In a comparison of curricula and curricula add-ons, the Montessori approach is shown to meet more criteria for the development of executive function for a more extended age group.

Diamond, A. (2010). "The Evidence Base for Improving School Outcomes by Addressing the Whole Child and by Addressing Skills and Attitudes, Not Just Content," *Early Education and Development*, 2: 780-793.

Dr. Adele Diamond, Professor of Developmental Cognitive Neuroscience at the University of British Columbia, is one of the world's leading researchers on the development of cognitive function and a supporter of Montessori education. In this article she discusses effective strategies for advancing academic achievement, and advises: "Programs that address the whole child (cognitive, emotional, social and physical needs) are the most successful at improving any single aspect – for good reason. For example, if you want to help children with academic development, you will not realize the best results if you focus only on academic achievement (though at first glance doing that might seem the most efficient strategy); counterintuitively, the most efficient and effective strategy for advancing academic achievement is to also nurture children's social, emotional, and physical needs."

References

American Montessori Society. (n.d.). Retrieved from https://amshq.org

Barth, P., Haycock, K., Jackson, H., Mora, K., Ruiz, P., Robinson, S., et al., (Eds.). (1999). Dispelling the myth: High poverty schools exceeding expectations. Washington, D.C.: Education Trust.

Blackburn, B. (2008). Rigor is not a four-letter word. Larchmont, NY: Eye on Education.

Blackburn, B. & Williamson, R. (2013). Four steps to increasing rigor in the classroom. *Leadership, 42*(4), 8-9.

Diamond, A. (2010). The evidence base for improving school outcomes by addressing the whole child and by addressing skills and attitudes, not just content. *Early Education and Development*, *2*, 780-793.

Diamond, A., & Lee, K. (2011). Interventions shown to aid executive function development in children 4 to 12 years old. Science, 333(6045), 959-964.

Dohrmann, K. R., Nishida, T. K., Gartner, A., Lipsky, D. K., & Grimm, K. J. (2007). High school outcomes for students in a public Montessori program. *Journal of Research in Childhood Education, 22*(2), 205-217.

East Dallas Community Schools. (2010). Summer newsletter 2010. Retrieved from the National Center for Montessori in the Public Sector: www.public-montessori.org.

Great Schools Partnership. (n.d.). Retrieved from http://edglossary.org/student-engagement/

Kannapel, P. J. & Clements, S. K. (2005). Inside the black box of high-performing high-poverty schools. Lexington, KY: Prichard Committee for Academic Excellence.

Lillard, A. S. (2005). Montessori: The science behind the genius. New York: Oxford University Press.

Lillard, A. S., & Else-Quest, N. (2006). Evaluating Montessori education. *Science, 313*, 18931894. National Center for Montessori in the Public Sector. (n.d.). Retrieved from: http://www.public-montessori.org.

Ragland, M.A., Clubine, B., Constable, D., & Smith, P.A. (2002). Expecting success: A Study of five high-performing high- poverty schools. Washington, DC: Council of Chief State School Officers.

Rathunde, K. (Summer 2003)**.** A Comparison of Montessori and Traditional Middle
Schools: Motivation, Quality of Experience, and Social Context. *The NAMTA Journal
28*(3), 12-52.

U.S. Department of Education. (n.d.). Competency-based learning or personalized learning.
Retrieved from: http://www.ed.gov/oii-news/competency-based-learning-or-
personalized-learning.

Williamson, R. & Blackburn, B. (2010). Rigorous schools and classrooms: Leading the way.
Larchmont, NY: Eye on Education.

3. **Provide an overview of the planned curriculum, including, as Attachment 4, 1 scope and
   sequence per content area per grade band (K-2, 3-5, 6-8, 9-12) the school plans to serve.**
SMS will be joining the Science Coalition and the Social Studies Coalition. A signed MOU will be
included in the attachments.

SMS will use an updated version of the education plan approved by DDOE for the First State
Montessori Academy in their 2012 application with current research and understandings of
how the Montessori classroom supports all children. The curriculum maps (scope and
sequence) found in attachment 4 are the documents approved for FSMA by the state of
Delaware on the DDOE site for approved charter applications.   These curriculum maps are
aligned to essential questions and big ideas as outlined in the Delaware State Standards. By the
nature of the Montessori approach, the scope and sequence is not a month by month or week
by week document. This would defeat the goal of personalized learning as outlined in the
research above. It instead serves as a guide for the classroom teacher to monitor children's
explorations of the essential questions, big ideas, and underlying conceptual understandings in
each content area. The following modeled on the First State Montessori application provides
an overview of the curriculum in each content area.

The Montessori curriculum is carefully structured and integrated to demonstrate the
connections among the different subject through these key ideas:

- **Unity of Human Beings**: Students develop an understanding of the similarities and
  differences of cultures across the world; that people interact with the natural world in
  distinct ways that produce cultural uniqueness; that people, places, and environments are
  integrated; that life involves producing and consuming.
- **Unity of all Living Things on Earth**: Students explore how living organisms, through time,
  met their needs for survival, responded to the changes in their surroundings, and
  contributed to the development of other living organisms. Natural science and outdoor
  education are important elements of our children's experience. They develop an
  understanding of how, through science, we learn how nature works.
- **Unity of the Universe Itself**: Students develop an understanding of their relationship and
  place in the development of the universe; how the earth has changed over time through
  physical, chemical, and geological processes.

Math: The self-correcting math materials sequentially highlight isolated concepts moving from
more concrete ideas to more abstract ideas. Math is connected to other parts of the

curriculum; for example, the study of time leads naturally to the study of History and the study of evolution in Biology. Considered as a unique branch of mathematics, geometry is given expanded emphasis in the Montessori curriculum. These Montessori hands-on materials augmented by replacement units from materials such as TERC investigations provide a rich and comprehensive math program covering all of the math strands as well as the big ideas of mathematical problem solving and communication.

English Language Arts in the integrated Montessori curriculum includes the History of Language, Parts of Speech, Sentence Analysis, Written Composition, Reading, Literature Study, Oral Language and Creative Drama. At all age levels in the Montessori classroom, there is emphasis on discussion, free-speech bounded by the classroom rules, and on oral reports given to various individuals, and group projects. The goal of the Montessori ELA area is to promote the use of language as part of reasoned thought. Instruction in Reading involves a balanced approach with an emphasis on the development of phonemic awareness and phonics as well as vocabulary and comprehension.

Science and Social Studies: While SMS will be joining the Science and Social Studies Coalitions, it is important to understand how the big ideas in these subject areas are supported by the coalitions units and instructional practices. As explained above, the Montessori Curriculum is integrated around major concepts of understanding. At the Elementary levels, science and social science topics such as anthropology, astronomy, biology, botany, chemistry, civics, economics, geography, geology, government, history, politics and sociology are not only treated as discrete topics but are interwoven in the curriculum. History provides the framework which gives order to the information acquired in the other areas. Biology gives the children a system of classification to structure and relate facts. Geography shows how the physical configurations of the earth contribute to the history of all people.

Because the Montessori Philosophy encourages exploration and hands-on learning, the community and environment are natural extensions of the classroom. Each subject area can be enhanced through field trips: to farms, marshes, beaches, quarries, museums, zoos, etc. so that instead of merely reading about rocks or amphibians, children have actual first-hand experience with them.   The Sussex community allows for a rich exploration of agriculture, land conservation, and beach environments.

4. **Provide, as Attachment 5, 1 Mathematics unit …and 1 English Language Arts (ELA) unit …**
   See Attachment 5

5. **Describe how the school will ensure that all students have equitable access to the curriculum.**
As shared above, the Montessori curriculum is based on the needs of the students and not on "dishing out curriculum" because of the child's grade level. The classroom is designed to allow children to explore various areas throughout an extended work period. A full range of materials for English Language Arts, Math, Science and Social Studies are available throughout the day and are easily accessible to children during this work period. This creates a unique

situation where all students in Montessori classrooms have access to all areas of the curriculum throughout the day unlike the traditional teacher centered classroom.

The Montessori curriculum allows for teachers to be aware of the needs of each student, guiding them through the learning process based on the student's innate desire to learn. In many cases, students can pick those activities for which they are most comfortable. Since the classes are multi-aged, students working in different modalities, content and paces are not unusual.   Teachers assist students to develop and monitor a daily work plan for younger children and a weekly plan for older children. Teachers discuss the child's strengths and challenges with them helping them to build a plan that both builds on their strengths and develops their challenges.   Some children will need more guidance and introduction to the choices in a Montessori classroom than others. They will need modified work plans and other structures to help them learn to manage the independence of the classroom. Some may need modifications of the materials to ensure that they are able to work successfully with them. These are all a natural part of the Montessori classroom environment. it is expected that the SMS teachers will receive support from the Shelton School in Texas which has been providing specific training to teachers working with learning different children for over 35 years.

6. **Describe the methods and systems that teachers will use to provide differentiated instruction to meet the needs of all students, including those who are gifted and talented.**

The primary approach to working with all children in a Montessori classroom is one of inclusion and differentiation. The Montessori classroom naturally supports this model for all children because:
- The classroom provides a full array of materials to support children across multi-grade levels. The nature of Montessori materials is such that they are designed to support a first exploration of a concept, a later relation of that concept to a more abstract understating and a final abstract understanding of a concept. All children can access a single material at their developmental level.
- The primary focus of instruction is one-to-one and small group lessons tailored to the needs of the children. Teachers group and regroup children based on their observations, the children's interests, and their learning goals. When needed, teachers with special education certification, speech therapists, and others may join a classroom to support the individual needs of children. These therapists easily fit in to the classroom design with small group and individual lessons designed to support a particular need of a child.
- This model of inclusion supports the social and emotional needs of all children as well. Exceptional and ELL students learn from all children in the classroom creating friendships and an appreciation and reducing social stigmas across the classroom community.
- Transitions are reduced as accommodations are made to support individual children within the classroom environment thereby maximizing learning and instructional time.
- Gifted students consolidate their understanding of concepts as they consider how to explain ideas to other students in the classroom while also having the independence to explore new ideas and grow themselves in areas of interest to them.

7. Provide a synopsis of plans for additional academic support for at-risk students, …
Working with at-risk students is not unusual for Montessori schools. Based on a sample of schools across the country, public Montessori schools have approximately 47% of their students under free and reduced lunch programs while 51% are Title I schools. Montessori district and magnet schools, however, have a higher concentration of lower income students, with 55% of students being eligible for free and reduced lunches and 64% being Title I schools.

The school will use a response-to-intervention (RTI) as outlined later which is aligned with the philosophical stance of the Montessori method. Teachers will evaluate students' progress, and make continuous changes in the environment, materials, or interactions that might better meet the child's needs.   When teachers are concerned about a child's progress, they will consult with the Education Director and Head of School to determine if additional supports are warranted. If it is determined that more information is needed to inform the instructional choices for a student, the school will follow the guidelines as outlined below in the section addressing Special Populations and At-Risk Students to access further special services to support them. The school will contract with an Educational Diagnostician, Speech Pathologist, Occupational Therapist, and will have trained special education and ELL teachers as a part of the school staff to support students within the context of the typical classroom as described above.

8. Explain how the graduation requirements will ensure student readiness for college…
   Not applicable