



CURRICULUM COMMITTEE MEETING

Monday, September 8, 2025 11:00 AM
Glastonbury Public Schools, Central Office, Conference Room A
628 Hebron Avenue
Glastonbury, CT 06033

1. Science Curriculum Review Report
2. AgriScience/ASTE Curriculum Review Report

SCIENCE

Curriculum Review Report
2024-2025

Glastonbury Public Schools
Glastonbury, CT

Submitted by:
Christine Tedisky, K-12 Director of Science

Presented to the Glastonbury Board of Education
Fall 2025



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Steering Committee Membership

Christine Tedisky, K-12 Director of Science

Tonya M. Claiborne, Ed.D., Director of Equity, Diversity, and Inclusion

Christina O'Brien, K-5 Director of English Language Arts and Library Media

Jennifer Barton, grade K, Naubuc Elementary School

Jennifer Brown, grade 1, Buttonball Lane Elementary School

Christine Szalkiewicz, grade 2, Hopewell Elementary School

Jennifer Overstreet, grade 3, Nayaug Elementary School

Austin Longendyke, grade 4, Buttonball Lane Elementary School

Lauren Perrault, PACE Teacher, Naubuc Elementary School

Susie Sandall, PACE Teacher, Hebron Avenue Elementary School

Lisa Ames, grade 6 Science, Gideon Welles School

Mary Pat Coburn, grade 7 Science, Smith Middle School

Beth Petritus, grade 8 Science, Smith Middle School

Stephen Falcigno, Science Head Teacher, Biology Teacher, Glastonbury High School

Phoebe Rockholz, Chemistry Teacher, Glastonbury High School

George Householder, Chemistry Teacher, Glastonbury High School

Anagha Sabnis-Sambo, Science Technology Coach, Biology Teacher, Glastonbury High School

Beth Raynor, Biology Teacher, Glastonbury High School

Doug Hutton, Physics Teacher, Glastonbury High School

Kristen Basiaga, Physics Teacher, Glastonbury High School

Introduction

Thank You

Thank you to the Science Curriculum Review Steering Committee, grades K-5 classroom and PACE teachers, and grades 6-12 science teachers for their collective efforts in this valuable process. The opportunity to reflect on our practices and make informed decisions about the future of our science program is both exciting and essential as we strive to provide all our students with the highest quality education. Through thoughtful reflection, strategic planning, and careful implementation, we will continue to grow as a department and better serve the needs of our students. Your collective feedback, self-reflection, and voluntary efforts are invaluable. I feel fortunate to work alongside such a dedicated group of professionals who consistently remind me of the importance of our work and the impact of the knowledge and skills we provide to our students. Thank you all for your ideas, suggestions, and contributions in ensuring that the science program in Glastonbury remains exceptional for our students!

Christine Tedisky
K-12 Director of Science

Purpose of Curriculum Review

The formal, comprehensive Curriculum Review is designed to be systematic, collaborative, and consistent with the Glastonbury Public Schools curriculum development process across content areas. As scheduled every five years, Curriculum Directors examine the entire program, including curriculum and assessment, instructional practices, student outcomes, professional learning, outreach and resources.

Through this process, we seek to identify areas for continued development, evaluate the alignment of program initiatives, and advance the goals and actions of the 6th Generation Strategic Plan. Findings will drive long and short-term goals and recommendations to support program improvements.

To complete the process, Director of Science, Christine Tedisky, led the department and a Curriculum Review Steering Committee through the examination of five program domains. This process is designed to determine strengths and challenges of each domain as well as produce recommendations to support short and long term goals for the program. The five domains under review include:

1. Curriculum & Assessment
2. Teaching & Learning
3. Professional Development
4. Communication & Outreach
5. Operations

Furthermore, two specific domains of the program were examined through an equity lens. This process supports our district's commitment to providing students with "mirrors" reflecting their own experiences and "windows" into experiences different from their own. We believe the curriculum should include diverse representation and perspectives and that teaching and learning should ensure equity and access by all.

This rigorous and reflective Curriculum Review underscores our dedication to fostering inclusive and dynamic learning environments and experiences, ensuring our curriculum not only meets the highest standards but also resonates with and supports every student.

Department Description

Mission and Philosophy

The Glastonbury Public Schools Science Department is dedicated to encouraging students to engage with the world around them through inquiry, creativity, and application of scientific concepts.

Quality science teaching fosters the processes of inquiry, creativity, applications of concepts, and the skills of critical thinking, organization, and communication. Through science instruction at Glastonbury Public Schools, students will develop methodologies that help them answer questions and arrive at conclusions based upon evidence. With these methodologies, students will be empowered to shape the world around them.

GPS Course Offerings and Staffing

Elementary Science			
Classroom Teachers are instructors of science at each grade level; they receive the support and coaching of the PACE teachers in each of the elementary buildings. One full-time paraprofessional is responsible for the management, inventory, and distribution of science curricular kits for all elementary buildings. At each grade level, there is a unit of study in life, physical, and earth/space science; all units include a content-related engineering task.			
Grade	Session I: September-November	Session II: December-February	Session III: March-June
K	Whatever the Weather	Moving and Grooving	Stayin' Alive
1	Blast Off to Space	Survival of Living Things	Waves All Around Us
2	Earth: Our Changing Planet	Matter and Its Properties	Plant Survival
3	Earth and Our Human Impact	Matter: Changes and Interactions	Animals and Their Environment
4	Energy is Everywhere	Dynamic Earth	Structure and Function
5	Heredity in Living Organisms	Earth and Its Place in the Universe	Waves and the Flow of Energy
Secondary Science			
From the Glastonbury High School Science staff, a 0.2 Head Teacher and a 0.2 Technology Coach are accounted for to support the department at the secondary level; GHS science teachers are also supported by three paraprofessionals for laboratory preparation, inventory, and equipment management. Two part-time tutors support students and teachers in CREST.*			

Grade	Course Offerings	
6 (4 Teachers)	Life Science	
7 (4 Teachers)	Planet Earth (Level 1 and Level 2)	
8 (4 Teachers)	Concepts of Physics (Level 1 and Level 2)	
9-12 (23 Teachers*)	Integrated Science (Level 2) Chemistry (Level 1 and Level 2) Biology (Level 2) AP Biology (Level 1) Physics (Level 2) Introductory Physics (Level 2) AP Physics 1 and 2 (Level 1) AP Physics C (Level 1) AP Chemistry (Level 1) AP Environmental Science (Level 1)	Advanced Research Mentorship (Level 1) Astronomy (Level 2; Semester) Human Anatomy and Physiology (Level 2) Forensic Science (Level 2) STEAM electives: Principles of Applied Robotics and Engineering (Level 1 and Level 2); Coding, Data Science, and Society (Level 1 and Level 2)

Executive Summary

The Glastonbury Public Schools Science Program continues to provide students with comprehensive, rigorous, and engaging curriculum, instruction, and assessments. The program provides students with relevant, authentic experiences grounded in our standards-based curriculum. To meet the needs of all learners, differentiated instructional practices, equitable opportunities across grade levels/courses, responsive professional development offerings, and appropriate resource allocations are needed. Our program thrives due to the expertise of our teachers, the high-quality instruction they provide daily, and the invaluable support of families and the community. This review highlights numerous commendations and offers recommendations and action plans that will promote thoughtful reflection and strategic planning for the future of Glastonbury's science program. These efforts will help the department identify opportunities for growth and continued progress to benefit our students.

Strengths and Celebrations

- Comprehensive, rigorous K-12 science curriculum aligned with the *Next Generation Science Standards* (NGSS), emphasizing inquiry, creativity, and real-world application.
- Consistent use of varied and authentic assessments (6-12) allowing students to demonstrate understanding in multiple ways.
- Active, student-centered learning with labs, modeling, group work, and student-driven inquiry across grade levels.
- Development of instructional practices that incorporate student voice and choice, especially at the secondary level.
- Strong community partnerships (planetarium, STEAM Labs, local organizations) and vibrant extracurricular offerings.
- Professional development aligns with strategic goals and values teacher voice.
- Safe, well-equipped science classrooms and labs supporting hands-on learning.
- Inclusive family communication with multilingual accessibility and multiple at-home learning modalities.

Priority Recommendations

- Strengthen instructional practices and resources to better serve our diverse student population, including multilingual learners and special education students.
- Improve vertical alignment and communication of science concepts, skill progression, and common learning experiences across all grade levels.
- Align the elementary report card criteria for science more closely with content and skill standards of the units of study.
- Enhance elementary science curriculum implementation by increasing instructional time and embedding interdisciplinary connections.
- Expand teacher professional development focused on differentiation, equity-based practices, and curriculum-specific training.

- Increase authentic learning opportunities through additional field trips, community partnerships, guest speakers, and expanded STEAM extracurriculars.
- Improve schedules at the elementary level to ensure all students, including those receiving special services, have full access to science instruction.
- Update and maintain annual lab safety training and chemical and equipment inventories.
- Explore common planning time for teachers and the development of STEAM labs in all elementary schools to enhance collaboration and learning environments.

Curriculum Review Findings

Domain 1: Curriculum & Assessment

Guiding Questions:

- Is the curriculum comprehensive, rigorous, and based on relevant standards?
- Are the assessment expectations and criteria clearly communicated?
- Do assessments provide valid and reliable information on student learning that is used to drive ongoing instructional decisions?
- Are there frequent opportunities to help identify and address learning gaps?
- *How effectively does our curriculum and assessments ensure equitable representation and perspectives of all students?*

Strengths:

- The K-12 science curriculum is comprehensive, rigorous, and is aligned with the Next Generation Science Standards.
- The curriculum is designed to promote meaningful student engagement, to allow students to make connections to real-world scenarios, and to develop the skills of inquiry, creativity, and application of scientific concepts. Hands-on laboratory experiences and the application of science and engineering practices are paramount to our units of study.
- Common summative assessments, aligned to curricular units, are implemented across grades 6-12. Assessments are varied and are designed for students to apply content knowledge and skills, to analyze and synthesize information, and to demonstrate understanding through claims, evidence, and reasoning.
- Written curriculum documents, which outline enduring understandings, essential questions, and concepts and skills, are accessible and used by all teachers in a digital format.

Recommendations & Actions:

- Review the science section of the elementary grade level report cards and develop new criteria that more accurately reflects the curricular units.
- Create and implement a comprehensive overview guide and review of the grades 3-5 NGSS grade band in order to better identify learning gaps and prepare for the NGSS Assessment in grade 5.
- Collaborate with the special education, literacy, and multilingual learners departments in the development of curriculum resources to support all learners.
- Explore additional field trip experiences to enhance real-world connections to the curriculum across grade levels.
- Continue curriculum development and unit refinement to include:
 - distinguishing learning outcomes between level 1 and level 2 (secondary level),
 - capturing common learning experiences for all students that include diverse perspectives and identities; and

- using tools to examine and evaluate equitable instructional practices and promote teacher self-reflection.
- Continue to refine common assessment opportunities that incorporate the three-dimensional (science discipline, crosscutting concepts, and science and engineering practices) standards and allow students to demonstrate their understanding for a variety of authentic purposes.
- Evaluate the vertical progression of science and engineering practices (skills) and crosscutting concepts across the grade levels and highlight areas within the curriculum where they are specifically addressed.

Domain 2: Teaching & Learning

Guiding Questions:

- Does instruction foster active learning by students K-12?
- Are Tier 1 strategies known and used by teachers to support all learners?
- Are there a variety of opportunities for students to demonstrate their understanding?
- *How effectively does teaching and learning promote access and support for all learners?*

Strengths:

- Active learning in science classrooms is fostered in a wide variety of ways. Students regularly engage in hands-on activities that include laboratory experiments and modeling of scientific concepts and processes. Group work, student choice, and cross-curricular connections are important aspects of science instruction.
- Teachers utilize various instructional strategies to meet student learning needs across grade levels and courses while allowing for student choice and voice in their representation of learning.
- Students demonstrate understanding in many ways beyond traditional assessments. Science and engineering practices, crosscutting concepts, and content application are developed through: writing with “Claim, Evidence, Reasoning,” modeling concepts with diagrams and simulations to allow students to build upon prior knowledge, and student-driven questioning that provides opportunities for all learners to explore their curiosities.
- The department, particularly at the secondary level, is actively engaged in the development of equity-based instructional practices to promote access and support all learners.

Recommendations & Actions:

- Expand teacher professional development focused on differentiation, equity-based practices, and curriculum-specific training, especially for K-5.
- Increase opportunities that foster inquiry, self-assessment, and relevancy for all students during instruction.

- Explore additional resources, including technology applications, lab materials and equipment as well as visual aids, that promote better access for all learners to science content and practices.
- Use common language to communicate the progression and vertical connection of science concepts and skills more clearly at the secondary level for better student understanding.

Domain 3: Professional Development

Guiding Questions:

- Are department-based goals provided to staff to support success with Educator Evaluation Plans?
- Do PD opportunities serve to promote active learning and high expectations for all students?
- Do PD opportunities serve to create safe, supportive, and inclusive learning environments?
- Do PD opportunities serve to prioritize the health and well-being of students and staff?
- Do all staff have access to interest-based professional learning experiences both in and out of the district?

Strengths:

- Department goals are connected to the GPS 6th Generation Strategic Plan, and are clearly articulated with teacher professional learning and instructional practices.
- The department is committed to deepening the work around inclusivity and equitable practices as connected to the district's strategic plan.
- Staff voice and choice is valued within the department with respect to professional learning needs.
- PACE Teachers (K-5) provide professional development for science in elementary schools and across the district.

Recommendations & Actions:

- Increase professional learning opportunities, K-5, that are directly connected to the units of study, especially through interdisciplinary connections.
- Create professional development opportunities for teachers around differentiated instruction in science, including equity-based instructional practices, and continue to offer experiences that meet individual staff needs.
- Increase the opportunities for science teachers to participate in external professional development offerings and/or engage with field experts.

Domain 4: Communication & Outreach

Guiding Questions:

- Are program-specific communications provided to families in their preferred language?

- Do at-home learning opportunities ensure all students can engage equally and enhance their understanding (e.g. captions, video subtitles, transcriptions)?
- Do community partnerships exist to support the initiatives and goals of the program?

Strengths:

- Program-specific communications are available to families in their preferred language through ParentSquare and the departmental website.
- Both in-school and at-home learning opportunities allow for students to engage in their understanding of science content through various modes of communication, including verbal, pictorial, and transcribed.
- The Glastonbury-East Hartford Magnet School Planetarium provides a unique resource and experiences for all students, explicitly connected to the curriculum units of study, as well as experiences for the community.
- Several partnerships are in place to enrich students' learning in science, such as grants funded by the Glastonbury Education Foundation (GW Greenhouse, GHS CREST, GHS STEAM Lab), clubs at the secondary level supporting initiatives at the elementary level, and close collaboration with local institutions to mentor students (specifically in Advanced Research Mentorship).
- STEAM Nights occur annually across the district elementary schools and showcase student work in science and engineering as well as highlight the interdisciplinary connections among math, science & engineering, the arts, and technology.
- There are a wide variety of middle school and high school clubs that engage students in extracurricular activities.

Recommendations & Actions:

- Continue to collaborate with community partners and local organizations to provide authentic connections and expertise from the scientific community to our students across the levels and ensure that partnerships/mentorships include experts from underrepresented groups.
- Explore additional science-related field trips as well as opportunities for guest speakers and community partners to come into classrooms and share expertise and real-world applications of science with students across the grade levels.
- Expand Science/STEAM-related extracurricular club opportunities across the elementary level.
- Continue to grow student interest and exposure to STEAM careers by providing real-world experiences and connections with experts in the fields across grade levels in science courses.

Domain 5: Operations

Guiding Questions:

- Are learning environments safe, supportive, and inclusive?
- Does staffing support the intended outcomes of the curriculum?

- Does the allotted time (e.g. daily schedule) support instructional outcomes of the curriculum?
- Do the instructional spaces support the intended outcomes of the curriculum?

Strengths:

- The science learning environments are safe, supportive, and inclusive, and provide appropriate laboratory safety equipment to students and staff.
- The allotted time for instruction at Glastonbury High School is appropriate to achieve the intended outcomes of the curriculum.
- Access to instructional spaces (the Eureka Lab at Naubuc School, the Greenhouse at Gideon Welles, the Center for Robotics, Engineering, Science, and Technology and the STEAM Lab at Glastonbury High School) allow students to have unique experiences and engage with state-of-the-art technical equipment.
- The paraprofessionals and tutors at Glastonbury High School support teachers and students in the science department with laboratory preparations, management of equipment, and individualized student support.
- Secondary classrooms are spacious and designed for laboratory experiences.
- The system for elementary supplies and equipment aligned to the units of study is adequate and supported by a full-time paraprofessional.

Recommendations & Actions:

- Provide professional learning opportunities for elementary teachers to plan interdisciplinary units of study in order to maximize student learning of science concepts and skills.
- Collaborate with building administration and special education personnel to improve schedules at the elementary level to ensure all students, including those receiving special services, have full access to science instruction.
- Continue to identify and provide annual safety training to all science teachers that is relevant and responsive to their needs and that is effective and efficient.
- Explore ways through scheduling at the secondary level for teachers who teach the same course to have common planning time.
- Complete and maintain an up-to-date inventory of all laboratory equipment at the secondary level to ensure that materials are accessible by all students and teachers in accordance with curricular units.
- Explore opportunities and funding to develop STEAM labs in all elementary schools.

Appendices

Appendix A Vertical Articulation Guide

Department	<i>Science</i>
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<p>Courses / At-A-Glance Guides (Teacher Facing) <i>List all of the courses and hyperlink the At-A-Glance Guides. Modify as needed based on departmental offerings.</i></p>

Pre-Kindergarten	<i>N/A</i>
Kindergarten	<i>Whatever the Weather, Moving and Grooving, Stayin' Alive</i>
First Grade	<i>Blast Off to Space, Survival of Living Things, Waves All Around Us</i>
Second Grade	<i>Earth: Our Changing Planet, Matter and Its Properties, Plant Survival</i>
Third Grade	<i>Earth and Our Human Impact, Matter: Changes and Interactions, Animals and Their Environment</i>
Fourth Grade	<i>Energy is Everywhere, Dynamic Earth, Structure and Function</i>
Fifth Grade	<i>Heredity in Living Organisms, Earth and Its Place in the Universe, Waves and the Flow of Energy</i>

Sixth Grade

- *Life Science*
- *Science & Engineering Practices - under construction beginning July 2024*

Seventh Grade

- *Planet Earth (L1/L2)*
- *Science & Engineering Practices - under construction beginning July 2024*

Eighth Grade

- *Concepts of Physics (L1/L2)*
- *Science & Engineering Practices - under construction beginning July 2024*

High School

Grade Level(s)	Course(s)
9	<i>Integrated Science</i>
	<i>Chemistry - L1/L2</i>

10	<i>AP Biology</i>
	<i>Biology - L2 (5410 & 5420)</i>
11	<i>AP Physics 1&2</i>
	<i>Physics - L2 (5470, 5480 & 5465)</i>
12/electives	<i>AP Physics C</i>
	<i>AP Chemistry</i>
	<i>AP Environmental Science - under construction</i>
	<i>Human Anatomy and Physiology - under construction</i>
	<i>Astronomy</i>
	<i>Forensic Science</i>
	<i>Advanced Research Mentorship - under construction</i>
Post-Graduate	
N/A	

AGRISCIENCE

Curriculum Review Report
2024-2025

Glastonbury Public Schools
Glastonbury, CT

Submitted by:
Elizabeth Cole, CTE Director

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B: Vertical Articulation Guide	
C. Other (e.g., unique scope and sequence, department-specific terminology and/or tools)	

Committee Membership

Adriana Bruno, Art Teacher Gideon Welles

Elizabeth Cole, CTE Director

Tracey DeDonato, 6-12 Director or English Language Arts and Library Media

Amanda DeLucia, AgriScience Teacher

Jenifer Donini, AgriScience Teacher

Christine Gilbert, AgriScience Teacher

Cassandra Murphy, Director of Special Education

Logan Tyler, AgriScience Teacher

Introduction

Thank You

Thank you to the AgriScience teachers and committee members who generously contributed their time, talent, and expertise to the 5-year program review process. Your thoughtful insights, dedication, and collaboration were instrumental in shaping a thorough and meaningful review of our programming. The work you've done not only honors the strength of our current program but also lays a strong foundation for continued excellence in the years to come. The contributions to follow will directly support our efforts to meet the needs of all learners at high levels and ensure that our programs continue to offer exceptional opportunities for every student.

Purpose of Curriculum Review

The formal, comprehensive Curriculum Review is designed to be systematic, collaborative, and aligned with the Glastonbury Public Schools curriculum development process across content areas. Scheduled every five years, Curriculum Directors examine the entire program, including curriculum and assessment, instructional practices, student outcomes, professional learning, outreach and resources.

Through this process, we seek to identify areas for continued development, evaluate the alignment of program initiatives, and advance the goals and actions of the 6th Generation Strategic Plan. Findings will drive long and short-term goals and recommendations to support program improvements.

To complete the process, Director of CTE, Elizabeth Cole, led the department and a Curriculum Review Steering Committee through the examination of five program domains. This process is designed to determine strengths and challenges of each domain, as well as produce recommendations to support the program's short and long-term goals. The five domains under review include:

1. Curriculum & Assessment
2. Teaching & Learning
3. Professional Development
4. Communication & Outreach
5. Operations

Furthermore, two specific domains of the program were examined through an equity lens during the review. This process supports our district's commitment to providing students with "mirrors" reflecting their own experiences and "windows" into experiences different from their own. We believe the curriculum should include diverse representation and perspectives and that teaching and learning should ensure equity and access by all.

This rigorous and reflective Curriculum Review underscores our dedication to fostering inclusive and dynamic learning environments and experiences, ensuring our curriculum not only meets the highest standards but also resonates with and supports every student.

Department Description

Mission and Philosophy

Our State Regional Agricultural Science and Technology Education (ASTE) center and elective high school agricultural science programming are committed to providing students with a comprehensive and innovative learning experience that instills a deep appreciation and understanding of agriculture, while preparing them for successful careers in the industry. Through hands-on learning, cutting-edge technology, and community engagement, we are empowering future leaders to demonstrate premier leadership skills, and make a positive impact on their own personal growth, communities, and the world.

We envision a future where the agricultural industry is sustainable, resilient, and equitable. Every student should have access to the knowledge, skills, and opportunities necessary to pursue a successful career in the agricultural field. Our ASTE and elective high school agricultural science programming aims to prepare students to be leaders in this movement by fostering a passion for agriculture and equipping them with the tools they need to succeed in a rapidly changing world.

GPS Course Offerings and Staffing

AgriScience

Classroom Teachers are instructors of Agricultural Science and Technology Education (ASTE) at Glastonbury High School. Four teachers provide direct instruction to students in grades 9-12 primarily as teachers of the State ASTE Regional Center and as general elective teachers at Glastonbury High School. One teacher also serves as a 0.2 Head Teacher to support ASTE specific programming, state reporting, recruitment and other ASTE center responsibilities. While all teachers are certified across all content areas in AgriScience and Leadership/FFA, each has their own unique specialty and assignments. One part-time office paraprofessional supports logistical programming, transportation, special events, community outreach, communications, FFA financials and student activities.

AgriScience is unique and follows what is known as the “Three Circle Model.” The Three Circle Model is the foundation of agricultural education. It includes classroom and laboratory instruction, FFA leadership activities, and hands-on extracurricular learning through Supervised Agricultural Experiences (SAEs). These three parts work together to help students build knowledge, grow as leaders, and gain real-world experience in agriculture. Every course offered in the department is designed in the three circle model, regardless of student affiliation with FFA or as a general elective student.

Program students are required to meet several obligations that are both co-curricular and extra curricular as a part of ASTE programming. AgriScience course offerings center on five major areas of study: Leadership and FFA, Animal Science, Plant Science, Agricultural Mechanics & Engineering and Natural Resources.

	Course Offerings <i>*UConn ECE course</i>
Leadership/FFA	Leadership 1, Leadership 2, Leadership 3, Leadership 4, Foundations of AgriScience & Technology, SAE Independent Study
Animal Science	Introduction to Animal Science, Livestock Management, Veterinary Anatomy & Physiology, Veterinary Science, Kennel Management, Introduction to Companion Animals*, Behavior and Training of Domestic Animals*, Animal Reproduction & Genetics
Plant Science	Fundamentals of Horticulture*, Floral Art & Design*, Advanced Floral Design*, Green Infrastructure and Sustainable Design
Agricultural Mechanics & Engineering	Outdoor Power Equipment, Equipment Systems & Repair
Natural Resources	Principles of Agroecology & Conservation, Fish & Marine Life Management, Wildlife Management, Forestry

Executive Summary

The Agricultural Science and Technology Education (ASTE) center and elective high school agricultural science programming at Glastonbury Public Schools provide a comprehensive and innovative experience for students rooted in the foundational “three circle model,” encompassing classroom instruction, FFA leadership activities, and Supervised Agricultural Experiences (SAEs). This rigorous program effectively prepares students for successful entry into college and/or post secondary careers in the agricultural industry through hands-on learning, cutting-edge technology, and engagement with a strong network of parents, alumni and community partners.

To meet the needs of all learners, instruction consistently employs diverse, active learning methods such as laboratory experiments, projects, and field experiences, offering abundant opportunities for students to apply knowledge and skills in authentic, real-world contexts. Supported by a small team of dedicated and highly qualified teachers, the program empowers students to develop leadership skills, achieve personal growth, and become future leaders in a sustainable and equitable agricultural field of their choice. This report highlights a few of the strengths and celebrations and offers recommendations and actions that will promote thoughtful next steps and strategic planning for the future of both the Regional ASTE center and the elective offerings provided to Glastonbury High School students.

Strengths and Celebrations

- There are abundant opportunities for tactile and sensory engagement through labs and performance tasks in authentic contexts such as the greenhouse, animal lab, and Ag mechanics shop. These performance tasks and skills are assessed through Career

Development and Leadership Development Events (competitions amongst FFA programs), and associated rubrics are integrated into the course content.

- Instruction consistently employs diverse, hands-on methods, such as laboratory experiments, projects, and field trips, to actively engage students in applying skills and concepts to real-world contexts, fostering collaboration and inquiry. Group work, student choice and cross-curricular connections are essential components of Agriscience programming.
- All AgriScience teachers hold industry certifications and/or are qualified to offer college credit opportunities as a result of professional learning opportunities.
- A strong and collaborative network of parents, alumni ("Friends of the FFA"), an active advisory board ("Consulting Committee"), and local industry professionals actively support the program, showcasing student learning (e.g., Spring Fair), providing program feedback, and offering diverse involvement opportunities like career days and mentorships
- The program prioritizes safe and supportive learning environments by systematically integrating comprehensive safety instruction and protocols across all content areas, ensuring students are equipped to work safely in laboratory and field-based settings.

Priority Recommendations

- Dedicate common planning time for assessment, evaluation, and collaborative work with special education staff to create differentiated materials and increase curricular access.
- Investigate specialized paraprofessional support for supply management and laboratory preparation.
- Prioritize collaboration with Special education to improve accessibility and support for all students, including the use of adaptive equipment and assistive technologies (ie, Augmentative and Alternative Communication Devices).
- Increase common planning time among teachers in the AgriScience department to support collaboration and instructional planning.
- Assign ASTE program students to an Ag teacher mentor study hall for SAE and academic support.
- Refine key recruitment materials and annual program communications (e.g., SAE expectation letters) for professional translation into prevalent community languages to improve accessibility for families.
- Dedicate one school counselor to supporting the unique scheduling needs for all ASTE program students. This support will also help ensure IEP & 504 meetings occur prior to the end of the previous school year.
- Create a long-term plan to strategically improve and expand overall agricultural program facilities to ensure inclusive and safe environments for all students:
 - Embed universal design principles.
 - Consolidate aquatic science facilities into a centralized and adaptable location.
 - Conduct a feasibility study and implement redesign or expansion of facilities.
 - Expand and equip the agricultural mechanics shop.

Curriculum Review Findings

Domain 1: Curriculum & Assessment

Guiding Questions:

- Is the curriculum comprehensive, rigorous, and based on relevant standards?
- Are the assessment expectations and criteria clearly communicated?
- Do assessments provide valid and reliable information on student learning that is used to drive ongoing instructional decisions?
- Are there frequent opportunities to help identify and address learning gaps?
- *How effectively does our curriculum and assessments ensure equitable representation and perspectives of all students?*

Strengths:

- The curriculum is comprehensive, rigorous, and aligned to industry (ie. OSHA) and legacy AFNR standards.
- Supervised Agricultural Experience (SAE) expectations are clearly defined, consistently communicated using standardized rubrics, and supported by regular parent communication.
- FFA students engage in Career Development (CDEs) and Leadership Development Events (LDEs) across the school year.
- Assessment expectations are consistent through the use of standardized rubrics.
- Assessment data informs instructional decisions, driving the use of scaffolding and differentiated materials to meet the needs of diverse learners.
- Individualized learning opportunities align with student levels and abilities while emphasizing local, agricultural, economic relevance and student choice. Teachers intentionally incorporate diverse perspectives and cultural differences through specific lessons. Opportunities for tactile and sensory engagement through labs and performance tasks.

Recommendations/Actions:

- Align written curriculum documents with current Agriculture, Food & Natural Resources (AFNR) and National FFA standards and continue to refine common summative assessments to include the three circle model for ASTE courses. For general elective courses, align rubrics to meet industry standards and continue to explore options for industry-certifications and college credit available to all students.
- Dedicate common planning time for assessment evaluation and collaborative work with special education staff to create differentiated materials and increase curricular access.
- Investigate specialized paraprofessional support for supply management and laboratory preparation.
- Diversify guest speakers and field trip opportunities
- Continue curriculum development and unit refinement to include the equitable representation and perspectives of all students in the guaranteed and written curriculum.

Domain 2: Teaching & Learning

Guiding Questions:

- Does instruction foster active learning by students K-12?
- Are Tier 1 strategies known and used by teachers to support all learners?
- Are there a variety of opportunities for students to demonstrate their understanding?
- *How effectively does teaching and learning promote access and support for all learners?*

Strengths:

- Instruction employs diverse, hands-on methods, (e.g, laboratory experiments, projects, field trips), that actively engage students, fostering collaboration and inquiry. Teachers use a variety of Tier 1 strategies to support all learners in daily activities and longer projects.
- Students are provided opportunities to demonstrate their learning through a variety of assessment modalities (e.g, practicums, discussions, debates, written work).
- Curriculum and course materials are digitally available to offer alternative options and modifications to ensure accessibility for diverse learning needs.

Recommendations:

- Dedicate common planning time and provide professional development focused on practices to drive differentiated instruction and enrichment.
- Identify and expand guaranteed curricular opportunities to foster meaningful conversations around diverse experiences, particularly within the mechanics pathway.
- Explore the use of adaptive equipment and assistive technologies (ie. Augmentative and Alternative Communication Devices) to improve accessibility and support for all students.
- Prioritize collaboration with Special education to improve accessibility and support for all students, including the use of adaptive equipment and assistive technologies (ie, Augmentative and Alternative Communication Devices).
- Align multilingual resources with the curriculum.
- Increase opportunities for student voice and choice.
- identify and increase multiple entry points for students to access learning experiences. Establish clear protocols to support students facing financial barriers to ASTE/FFA program participation.

Domain 3: Professional Development

Guiding Questions:

- Are department-based goals provided to staff to support success with Educator Evaluation Plans?
- Do PD opportunities serve to promote active learning and high expectations for all students?

- Do PD opportunities serve to create safe, supportive, and inclusive learning environments?
- Do PD opportunities serve to prioritize the health and well-being of students and staff?
- Do all staff have access to interest-based professional learning experiences both in and out of the district?

Strengths:

- All AgriScience teachers hold industry certifications and/or are qualified to offer college credit opportunities as a result of professional learning opportunities.
- All teachers have participated in targeted PD, both in and out of the district, specifically focused on creating safe, supportive, and inclusive AgriScience learning environments (ie., SAE placement sites, labs, greenhouses, animal labs, mechanics shop).
- All staff have access to interest-based professional learning experiences, most of which are conducted out-of-district (ie., CASE, NEAT, Germinate, Career Safe) and are grant-sponsored.

Recommendations:

- Develop shared, department-based goals (ie., college credit completion, certification rates) and secure dedicated planning time for staff to collaboratively work towards achieving them.
- Continue to offer and expand PD focused on creating safe, supportive, and inclusive learning environments, addressing diverse student needs (ie., Special Education) and promoting equitable practices (ie., adaptable equipment).
- Cross-train multiple teachers in diverse AgriScience skills and certifications, ensuring comprehensive instructional capacity across pathways.
- Increase common planning time among teachers in the AgriScience department to support collaboration and instructional planning.
- Assign ASTE program students to an Ag teacher mentor study hall for SAE and academic support.

Domain 4: Communication & Outreach

Guiding Questions:

- Are program-specific communications provided to families in their preferred language?
- Do at-home learning opportunities ensure all students can engage equally and enhance their understanding (e.g. captions, video subtitles, transcriptions)?
- Do community partnerships exist to support the initiatives and goals of the program?

Strengths:

- The ASTE program uses ParentSquare as a key communication platform, strategically leveraging its multilingual capabilities to ensure inclusive and accessible information dissemination to families in their preferred language(s).
- Learning resources and assignments are provided in both physical and digital formats via Google Classroom, ensuring universal access to diverse student learners
- A strong and collaborative network of parents, alumni ("Friends of the FFA"), an active advisory board ("Consulting Committee"), and local industry professionals actively support the program, showcasing student learning (e.g., Spring Fair), providing curriculum feedback, and offering diverse involvement opportunities like career days and mentorships.

Recommendations:

- Strengthen strategic partnerships with industry stakeholders, community organizations, and relevant institutions to enhance program initiatives, expand resources, and increase the availability of diverse co-curricular experiences.
- Improve distribution of recruitment materials and annual program communications (e.g. SAE expectation letters) for professional translation into prevalent community languages to improve accessibility for families.
- Improve program materials to reflect the needs of multilingual families
- Expand opportunities for community engagement within the district through initiatives such as purposeful play activities, the annual Spring Fair, and educational workshops.
- Explore opportunities to integrate relevant community service projects into the curriculum, and investigate funding possibilities through avenues such as the National FFA Service Grant to support these initiatives.

Domain 5: Operations

Guiding Questions:

- Are learning environments safe, supportive, and inclusive?
- Does staffing support the intended outcomes of the curriculum?
- Does the allotted time (e.g. daily schedule) support instructional outcomes of the curriculum?
- Do the instructional spaces support the intended outcomes of the curriculum?

Strengths:

- The program prioritizes safe and supportive learning environments by systematically integrating comprehensive safety instruction and protocols across all content areas, ensuring students are equipped to work safely in laboratory and field-based settings.

- A team of four educators and one part-time office paraprofessional supports programming to deliver a comprehensive and diverse range of experiential learning opportunities in the three circle model, aligned with leadership, FFA, SAE, Animal Science, Plant Science, Agricultural Mechanics, and Natural Resources pathways. These opportunities include robust content delivery, relevant field experiences, expert guest speakers, and extended learning opportunities beyond the regular school day and year.
- GHS's block scheduling system effectively facilitates the integration of practical, hands-on laboratory experiences and off-site learning experiences within instructional time, enhancing students' applied learning and skill development.

Recommendations & Actions:

- Dedicate one school counselor to supporting the unique scheduling needs for all ASTE program students. This support will also help ensure IEP & 504 meetings occur prior to the end of the previous school year.
- Investigate specialized paraprofessional support for supply management and laboratory preparation.
- Create a long-term plan to strategically improve and expand overall agricultural program facilities to ensure inclusive and safe environments for all students:
 - Embed universal design principles.
 - Consolidate aquatic science facilities into a centralized and adaptable location.
 - Conduct a feasibility study and implement redesign or expansion of facilities.
 - Expand and equip the agricultural mechanics shop.

Appendices

Vertical Articulation Guide

AgriScience

AgriScience instruction centers on five major areas of study: Leadership and FFA, Animal Science, Plant Science, Agricultural Mechanics & Engineering and Natural Resources. Leadership/FFA courses, Career Development (CDE's) and Leadership Development Events (LDE's) are for FFA members/ASTE program students only and are not open to the general elective population. Membership in The National FFA Organization offers a multitude of opportunities for students both in and outside of the classroom. FFA members become leaders in both their school and home communities, participating in events ranging from fundraising and community service to competitions in public speaking and career skills.

Below are the recommended specialized paths of study and FFA opportunities offered through the ASTE program

Leadership & FFA

All 4 years: Supervised Agricultural Experience (SAE)

9th	10th	11th	12th
Leadership 1 Foundations of AgriScience & Technology Creed Speaking LDE Quiz Bowl LDE	Leadership 2 Agriscience Fair Ag Sales LDE Opening and Closing LDE	Leadership 3 <i>*under construction*</i> Employability Skills LDE Prepared Public Speaking LDE	Leadership 4 Extemporaneous Public Speaking LDE

Career Development Events (CDE's)

Farm & AgriBusiness Management CDE, Agricultural Education CDE

Leadership Development Events (LDE's)

Marketing Plan LDE, Agricultural Communications LDE, Parliamentary Procedure LDE, Conduct of Chapter Meetings LDE

Animal Sciences

9th	10th	11th	12th
Intro to Animal Science <i>*under construction*</i>	Kennel Management Livestock Management <i>*under construction*</i> Fish & Marine Life Management	Introduction to Companion Animal ECE Animal Reproduction & Genetics Veterinary Anatomy & Physiology	Veterinary Science Behavior & Training of Domestic Animals ECE

CDE's: Poultry Judging CDE, Livestock Judging CDE, Equine Judging CDE, Dairy Judging CDE, Milk Quality CDE, Veterinary Science CDE, Meat Evaluation CDE, Food Science CDE

Plant Sciences

9th	10th	11th	12th
Fundamentals of Horticulture <i>ECE</i> Principles of Agroecology and Conservation	Floral Art and Design <i>ECE</i> Outdoor Power Equipment	Green Infrastructure & Sustainable Design Advanced Floral Design <i>ECE</i> Equipment Systems and Repair	AP Environmental Science* <i>offered via the Science Department</i>

CDE's: Floriculture CDE, Landscape Nursery CDE, Big E Landscape Design, Big E Floral Competition

Agricultural Mechanics & Engineering

Can be taken at any time, in sequential order.

1. Outdoor Power Equipment
2. Equipment Systems and Repair

CDE's: Safe Equipment Operation CDE, Ag Mechanics CDE

Natural Resources

9th	10th	11th	12th
Principles of Agroecology and Conservation Fundamentals of Horticulture <i>ECE</i>	Fish and Marine Life Management Outdoor Power Equipment	Wildlife Management Equipment Systems and Repair Green Infrastructure & Sustainable Design	Forestry AP Environmental Science* <i>offered via the Science Department</i>

CDE's: Environmental and Natural Resources CDE, Forestry CDE, Aquaculture CDE