Southington Board of Education Meeting

Thursday, December 11, 2025 6:30 PM
John Weichsel Municipal Center Public Assembly Room
200 North Main Street
Southington, CT 06489

COMMITTEE OF THE WHOLE

1. CALL TO ORDER
2. Executive Session
   a. Student Matters
3. Reconvene Meeting - Regular Session 7:00 p.m.
4. Pledge of Allegiance
5. Approval of Minutes - November 13, 2025
6. Public Communications
   a. Communications from Student Board Representatives
   b. Communications from Board of Education
   c. Communications from Administration
   d. Communications from Public - Agenda Items Only
7. Committee Reports
   a. Curriculum and Instruction Meeting - December 3, 2025
   b. Policy and Personnel Meeting - December 9, 2025
8. Superintendent's Report
   a. Personnel Report
9. Old Business
   a. Town Government Communications
   b. Capital Improvement Plan 2026-27 to 2030-31 - Second Reading
10. New Business
    a. Policy 5131.7 - Restorative Practices Response - NEW - First Reading
    b. Policy 6154 - Homework - REVISED - First Reading
    c. Policy 6161.2 - Library Collection Development and Maintenance Policy - NEW - First Reading
    d. Policy 6161.3 - Library Display and Program Policy - NEW - First Reading
    e. Policy 6161.4 - Library Material Review and Reconsideration - NEW - First Reading
    f. Approval of Job Descriptions
       1. Instructional Technology Classroom Assistant - NEW
       2. Transition Department Leader - NEW
       3. Principal - REVISED
       4. Assistant Principal - REVISED
       5. Classroom Teacher - REVISED
       6. Paraeducator - REVISED

7. Applied Behavior Analysis (ABA) Therapist - REVISED

g. K-5 Health - New Course Curriculum - First Reading
h. Grade 6 Science - New Course Curriculum - First Reading
i. SHS AP Human Geography - Textbook Adoption REPLACEMENT - First Reading
j. SHS AP Government and Politics - Textbook Adoption REPLACEMENT - First Reading
k. SHS Advanced Pottery - New Course Proposal - First Reading
l. SHS Emergency Medical Technician - New Course Proposal - First Reading
m. SHS - Archery Unit Proposal - First Reading
n. SHS - Agricultural Science - Course Change Proposal - First Reading
    1. Proposal #1 - Advanced Equine Science
    2. Proposal #2 - Advanced Livestock Science
    3. Proposal #3 - Veterinary Technology
    4. Proposal #4 - Advanced Wildlife
o. Superintendent's Annual Report 2024-25

11. Public Communications
    a. Public
12. Adjournment

The minutes presented within the document provide a summary of the discussion that took place at the Board of Education meeting. For the complete discussion of the agenda items, please view the video of the Board meeting on our website at https://www.southingtonschools.org. These minutes are considered a draft until approved at the following regular Board of Education Meeting.

SOUTHINGTON BOARD OF EDUCATION, SOUTHINGTON, CT
Regular Meeting
Committee of the Whole
November 13, 2025, at 7:00 PM
John Weichsel Municipal Center Public Assembly Room
200 North Main Street Southington, CT 06489

1. **CALL TO ORDER BY SUPERINTENDENT OF SCHOOLS**
   Mr. Madancy, Superintendent of Schools, called the meeting to order at 7:00 p.m.

   Board Members Present: Mr. Joseph Baczewski, Mr. Robert Brown, Ms. Lisa Cammuso, Mr. Sean Carson, Mrs. Colleen Clark, Mrs. Dawn Derynoski-Anastasio, Mr. Zaya Oshana, Mr. Cecil Whitehead
   Board Members Absent: Mrs. Terri Carmody
   Cabinet Members Present: Mr. Steven Madancy, Superintendent; Mr. Frank Pepe, Assistant Superintendent; Mrs. Jennifer Mellitt, Director of Business & Finance; Mrs. Amy Aresco, Interim Pupil Services Director
   Student Board Representatives Present: Ms. Arshi Roy, Mr. Samrath Singh

2. **Pledge of Allegiance**
   Mr. Madancy asked the student representative to lead the Pledge of Allegiance.

3. **Swearing in of Board Members by the Town Clerk**
   Mr. Madancy confirmed with Ms. Larkin, Town Clerk, that she had sworn-in and administered the oath of affirmation to Mrs. Carmody earlier in the day.

   Mr. Madancy called Mrs. Carmody to join the Board of Education meeting remotely.

   Ms. Kathy Larkin conducted the swearing-in ceremony and administered the oath of affirmation to the newly elected Board Members.

4. **Election of Board Officers started by the Superintendent of Schools**
   Mr. Madancy called for nominations for Chairperson of the Board of Education.

   Mrs. Carmody nominated Mr. Oshana as Board of Education Chairperson.
   Mr. Brown seconded the nomination for Mr. Oshana as Board of Education Chairperson.

Roll Call Vote:

- Mr. Baczewski – Yes
- Mr. Brown – Yes
- Ms. Cammuso – Yes
- Mrs. Carmody – Yes
- Mr. Carson – Yes
- Mrs. Clark – Yes
- Mrs. Derynoski-Anastasio – Yes
- Mr. Oshana – Yes
- Mr. Whitehead – Yes

Mr. Oshana was unanimously elected Chairperson of the Board of Education, 9-0.

Mr. Oshana indicated he is honored and humbled to not only be an elected member of the Board of Education but also the newly elected Chairperson. He thanked the community, other Board Members, and his family. He is committed to serving on the Board with integrity, dedication and transparency. He is excited to work alongside the other Board members to provide the best possible educational opportunities for the students. Mr. Oshana is proud to serve with a group of people who come from different backgrounds, experiences and perspectives but who all have the same goal of doing what is right for the students, teachers, families and community.

Mr. Oshana took over the meeting and called for nominations for the Vice-Chairperson of the Board of Education.

Mr. Brown nominated Mrs. Carmody as Vice-Chairperson of the Board of Education.
Mr. Baczewski nominated Mr. Brown as Vice-Chairperson of the Board of Education.

Roll Call Vote:

- For Mr. Brown:
  - Mr. Baczewski, Mr. Carson, Mrs. Clark, Mr. Whitehead
- For Mrs. Carmody:
  - Mr. Brown, Ms. Cammuso, Mrs. Carmody, Mrs. Derynoski-Anastasio, Mr. Oshana

Mrs. Carmody was elected Vice-Chairperson of the Board of Education, 5-4.

Mrs. Carmody thanked the Board members for electing her as Vice-Chairperson. She indicated she will continue the work she has done for the last 18 years, reaching all the students as best she can.

Mr. Oshana called for nominations for the Secretary of the Board of Education.

Ms. Cammuso nominated Mrs. Derynoski-Anastasio as Secretary of Board of Education.
Mr. Baczewski nominated Ms. Cammuso as Secretary of Board of Education.

Roll Call Vote:

- For Ms. Cammuso:
  - Mr. Baczewski, Mr. Carson, Mrs. Clark, Mr. Whitehead
- For Mrs. Derynoski-Anastasio:
  - Mr. Brown, Ms. Cammuso, Mrs. Carmody, Mrs. Derynoski-Anastasio, Mr. Oshana

Mrs. Derynoski-Anastasio was elected Secretary of Board of Education, 5-4.

Mr. Oshana called for a brief recess at 7:12 p.m.
Regular meeting resumed at 7:21 p.m.

5. Moment of Silence

Conrad Gozzo passed away on October 29, 2025.

- Mr. Gozzo was hired by Southington Public School in September of 1960 and retired in June 1990.

Angelo Coppola passed away on November 1, 2025.

- Dr. Coppola was hired by Southington Public Schools in September of 1964 and retired in June 2003.

6. Approval of Minutes - October 23, 2025

MOTION made by Mr. Baczewski and seconded by Mr. Brown, "Move to approve the BOE Meeting Minutes from October 23, 2025." Motion carried 9-0.
Attachments: (1)

7. Public Communications

a. <u>Communications from Student Board Representatives</u>

Ms. Roy gave the District Report:

- At Derynoski, the Therapeutic Learning Center participated in a district food drive to support students in need, with K–2 and 3–5 classrooms teaming up to collect donations.
- JFK had Hats for Hope on Friday November 7, 2025. Students and staff wore hats to raise funds for the Tommy Fund, supporting children with cancer.
- Student Leadership Council implemented a gratitude wall in the JFK cafeteria featuring positive messages.
- Southington Community Services delivered donations of canned goods and non-perishable items to families for Thanksgiving.
- Comprehensive Learning Center is sponsoring the annual BINGO event at JFK to showcase the program and raise funds for field trips.

- On November 7, 2025, Flanders held the 21st Annual Veterans Day Ceremony with breakfast, student artwork, readings, and musical performances to honor veterans.
- DePaolo Middle School 8th grade students decorated Veteran Stars to be displayed around the school and wrote letters to veterans through Operation Gratitude. A special thank you Army Sergeant Lou Urso, a Vietnam veteran.
- DePaolo's International Club celebrates cultural diversity monthly through lessons in geography, history, and traditional foods fostering connections across cultures.
- The first Lego League Competition on Saturday November 15, 2025, will be hosted at DePaolo, led by High School Robotics Team, the CyberKnights, featuring teams from across the town and state.
- DePaolo's Leadership Program is currently collecting toys for the annual holiday toy drive.

Mr. Singh gave the School Report**:**

- The Blue Knights Marching Band performed at MetLife Stadum over the past weekend and placed 2nd at Nationals with a score of 96.45. Students showcased exceptional skill and teamwork, demonstrating the program's continued excellence on the national stage. The Blue Knights Color Guard was also awarded Best Color Guard.
- Students are currently on an Italy Trip completing an educational and cultural immersion experience.
- Veterans Concert took place on November 10, 2025.
- Members of Team 195 visited the American Legion on November 10, 2025.
- Students are preparing to compete in the American Legion Oratorical Contest.
- Powder Puff is scheduled for three games. The first will take place on Saturday, November 15, 2025, at 6:00 p.m.
- Parent–Teacher Conferences at taking place November 13, 2025. This is the first year without an open house; it will be replaced with a spring session of Parent-Teacher Conferences.
- Culture Night will take place on December 3, 2025. Students are preparing to participate in the school's cultural showcase.
- Everyone one had a good time at the Pep Rally, Homecoming Game, and Homecoming Dance had a great time.

Mr. Singh gave the Sports Report:

- Katie Cavanaugh, Girls Cross Country Captain, qualified for New England Regionals with a top-25 performance at the State Open and competed in Vermont this past week.

- Eight swimmers from the Girls Swim Team advanced through Class LL time trials and competed in the championships.
- The Football Team defeated Windsor High School 28-7. They will host Maloney on November 14, 2025, for Senior Night,
- Many student athletes attended a CIAC conference titled Student Empowerment Day. The conference focused on leadership, confidence building, and community engagement, including panels specifically for men of color and women's leadership.

b. Communications from Board of Education

Mr. Brown congratulated the elected Board Members. He pledged and asked for the Board Member to collaborate, listen, also to work efficiently and effectively. Everyone is there for the one common focus of what is best for the students and to help the teachers teach the students.

Ms. Cammuso congratulated all the Board members and indicated it is an honor to be elected as a Board of Education Member. She sincerely thanked the community for entrusting her with this very important role. She is deeply committed to upholding the trust in her ability to serve and support the schools and listen to all members of the community.

Mr. Carson echoed the previous sentiments of the other Board members. He indicated he looks up to Mr. Brown as an example of how to lead, listen, and make decisions according to what the voters want and need. He thanked all the voters and is looking forward to doing some positive things in Southington with his fellow Board Members.

c. Communications from Administration

Mr. Madancy informed us that the Blue Knights Marching Band were the Division IV State Champions. They won all categories including best music, best visual, best overall effect, best color guard, and best percussion.

There is an attachment of a letter to Governor Lamont and the Bonding Commission from our delegation advocating for funding for the High School Tennis Court and Parking Lot Project. Mr. Madancy is looking forward to working with Town and State Officials to keep the project moving.

Mr. Madancy thanked the community for supporting the referendum to get the roofs fixed at Thalberg, Hatton and Strong.

The Parking Lot Project at strong was completed this week. He thanked the Board for supporting the project.

Mr. Madancy was notified by CABE that Mrs. Clark earned a Certified Board of Education Member Designation. Congratulations to Mrs. Clark.
Attachments: (2)

d. Communications from Public - Agenda Items Only
David Derynoski – 745 Berry Patch Way, Southington, CT 06489
Mr. Derynoski congratulated all the Board Members. They have a task ahead of them to fill an obligation to the Town of Southington. He thinks it is a great team and wished them good luck.

8. Superintendent's Report

a. Personnel Report
MOTION made by Mr. Brown and seconded by Mrs. Clark, "Move that the Board of Education approve the Personnel Report as submitted by the Human Resource Department." Motion carried 9-0.
Attachments: (1)

9. Old Business

a. Town Government Communications
No comment made.

10. New Business

a. Capital Improvement Plan 2026-27 to 2030-31 - First Reading
Mr. Oshana asked that any questions be directed to Mr. Madancy, Mrs. Mellitt and Mr. Fickel; they will then be passed along to the Board Members.

b. Approval of Out of State / Overnight Field Trips

1. SHS - Marching Band - Washington, D.C.
MOTION made by Mr. Baczewski and seconded by Mrs. Clark, "Move to approve the out of state/overnight field trip for the SHS Marching Band." Motion carried 9-0.

Mr. Oshana commented on how the Marching Band is an amazing ambassador for the Town of Southington. Mrs. Ossias and Mr. Stuppler do a great job.

Mrs. Clark asked if this field trip would take place during the Cherry Blossom Festival. Mr. Madancy would get back to her with an answer.

Ms. Cammuso was in the Marching Band/Color Guard when she was younger and stated is it incredible to hear all the updates.

Attachments: (1)

11. Public Communications

a. Public

Jillian Carlson, 62 Old Turnpike Road, Southington, CT 06489.
Ms. Carlson congratulated the newly elected and returning Board Members. She indicated, for the first time in over 20 years, the Southington Voters elected a democratic majority to the Board of Education. The message from the community is clear; Southington is demanding change. Ms. Carlson asked the Board to begin the process of hiring a qualified, permanent Direct of Pupil Services.
Ms. Carlson shared previous, documented concerns about the Special Education Department from the administration. The district has approved a new Special Education Diagnostic Classroom but has not reevaluated or improved the programs already in place. Ms. Carlson is asking for a transparent, competitive, community-involved process designed for hiring a new Director of Pupil Services.

12. Executive Session

a. Student Matters

MOTION made by Mrs. Clark and seconded by Mr. Carson, "Move to go into Executive Session, excluding the public and the press, for the purpose of discussing Student Matters; upon conclusion reconvene to public session." Motion carried 9-0.
The phone call ended with Mrs. Carmody; she did not attend Executive Session.
Mr. Madancy and Mr. Pepe were invited into Executive Session.
Executive Session started at 7:48 p.m.
Executive Session ended at 8:03 p.m.

13. Adjournment

MOTION made by Mrs. Clark and seconded by Mr. Baczewski, "Move to adjourn" Motion carried 8-0.
Meeting adjourned at 8:04 p.m.

Respectfully submitted,

Recording Secretary

Board of Education

Administrative Report

December 11, 2025

1. South End Roof, Being added to town's CIP
2. Rudolph Production @ SHS Friday, 12/5
3. Budget Update (Goal is to get budget books to BOE members on 1/8/25)
4. Pupil Services Director, posting update

SOUTHINGTON Public Schools

Steven G. Madancy
Superintendent of Schools

Frank M. Pepe
Assistant Superintendent of Schools

200 North Main Street, Southington, CT 06489 ❖ www.southingtonschools.org ❖ Phone: 860-628-3202 ❖ Fax: 860-628-3205

Southington Board of Education
Curriculum & Instruction Committee Meeting Minutes
Wednesday, December 3, 2025 – 10:00 a.m.
Technology Training Lab (Public Assembly Room)
Municipal Center, 200 North Main Street
Southington, CT 06489

Committee Members Present: Committee Chair Bob Brown, Dawn Derynoski-Anastasio
Committee Members Absent: Terri Carmody, Colleen Clark
Administration Present: Frank Pepe

Meeting called to order by Committee Chair, Mr. Bob Brown at 10:00 am

1. K-8 Health and PE Curriculum Specialist, Michael Colantonio, presented revised K-5 Health Curriculum. The revisions align with National and State Standards and are presented via the *Coordinated Approach To Child Health*, otherwise known as *CATCH*. The curriculum is driven by eight standards which are as follows.
    - Standard 1: Concepts/Functional Health Information
    - Standard 2: Analyzing Influences
    - Standard 3: Accessing Valid Health Info.
    - Standard 4: Interpersonal Communication
    - Standard 5: Decision Making
    - Standard 6: Goal Setting
    - Standard 7: Self-Management
    - Standard 8: Advocacy

    CATCH is a skills-based versus content approach, meaning students have multiple opportunities to engage in the concepts throughout each lesson. From Kindergarten students learning about their five senses and the importance of brushing and flossing their teeth to fifth graders setting goals for healthy lifestyles, each unit contains activities for real life planning based on knowledge attained.

2. Lindsay Davenport presented revised Sixth Grade Science Curriculum for both middle schools. The units begin as all the elementary and middle science curriculum do, with an anchoring phenomenon. Students create an *Initial Class Consensus Model* and develop a *Driving Question Board*, which are continuously revisited as lessons unfold. Final assessments for each unit force students to use the knowledge gained through the lesson experiences and apply to a novel challenge, demonstrating true comprehension.

3. SHS Department Leader Heather Allenback presented two new textbooks, AP Human Geography and AP Government and Politics. Advanced Placement courses require the textbooks used be from an approved list, as these two recommended texts are. The cost for AP Human Geography is $11,268 and Ap Government and Politics is $11,264. Both associated fees furnish the department with six-year licenses and complement the instruction being provided.

SOUTHINGTON Public Schools

Steven G. Madancy
Superintendent of Schools

Frank M. Pepe
Assistant Superintendent of Schools

200 North Main Street, Southington, CT 06489 ❖ www.southingtonschools.org ❖ Phone: 860-628-3202 ❖ Fax: 860-628-3205

4. SHS Art Teacher Barbara Szymanski presented a proposal for a new course titled Advanced Pottery. Currently no such opportunity exists for students who want to build skills beyond Pottery 1. Advanced Pottery would serve sophomores, juniors and seniors and would run as a ½ credit, ½ year course. The major components of the course feature advanced hand building techniques, extensive wheel throwing, slip casting, slump molds and glazing and decorative techniques. For the course to run, a request for three wheels needs to be added over three years. Each wheel costs $1,800.00. The current wheels in use are 24 years old and were added when the art wing was established in 1988. The course could run without additional equipment; however, the quality of the experience would be affected.

5. Head of Counseling Services Jen Discenza presented a new proposal titled, SHS Emergency Technician (EMT). There is an extreme shortage of EMTs, and this course prepares students for certification utilizing basic knowledge and skills necessary to stabilize and safely transport patients ranging from non-emergency and routine medical transport to life threatening emergencies. Students will learn the knowledge and skills necessary to provide out of hospital emergency medical care and transportation for critical and emergent patients who access the emergency medical services (EMS) system. Students will learn to perform interventions with the basic equipment typically found in an ambulance. The EMT program is based upon the U.S. Department of Transportation curriculum. The high school is requesting conceptual approval of the course so they may pursue funding sources. The associated costs to run a section of the course is approximately $16,000.

6. SHS Department Leader Tony Loomis presented a unit proposal titled Archery. Archery was taught at SHS up until 2016 as an outdoor activity. It phased out because of the many uncontrollable variables such as wind and the difficulty of setting up and breaking down of the targets. The new proposal is for an indoor unit which serves as more controlled and contained space. The protective curtain and associated equipment were purchased a few years ago and the unit was piloted last year by Mr. Loomis, who is *National Archery In The Schools Program* (*NASP*) trained. The course is taught using the *Command Style* with a major emphasis on safety. A teacher would need to successfully complete the NASP training to have the choice to engage in the unit.

7. Ag Sci Department Leader Nicole Wilcox presented four course change proposals, Advanced Equine Science, Advanced Livestock Science, Veterinary Technology, and Advanced Wildlife. These proposals are a result of the department examining which courses need to focus deeper on specific topics to provide students greater opportunities while at SHS and after graduation. The new courses allow greater choice based on student interest and capitalize on each instructor's strengths and background.

The meeting adjourned at 12:00 pm.

Respectfully Submitted,

Frank Pepe

SOUTHINGTON Public Schools

Steven G. Madancy
Superintendent of Schools

Frank M. Pepe
Assistant Superintendent of Schools

200 North Main Street, Southington, CT 06489 www.southingtonschools.org Phone: 860-628-3202 Fax: 860-628-3205

Board of Education Southington, Connecticut

Policy & Personnel Committee Meeting Minutes Draft

Superintendent's Conference Room

Municipal Center, 200 North Main Street

Tuesday, December 9, 2025 – 5:30 p.m.

Members Present: Dawn Derynoski-Anastasio (Chair), Bob Brown, Cecil Whitehead

Members Absent – Joe Basczewski

Administration Present: Assistant Superintendent - Frank Pepe, Interim Director of Pupil Services – Amy Aresco, Human Resource Manager – Michelle Passamano, Digital Learning Coordinator – Rebecca Savelkoul

AGENDA

Meeting Called to Order – 5:30 p.m.

- The meeting started with a follow up of old business. During the September 30, 2025 meeting, associated *Regulations* of *Policy 5121.3 – Academic Dishonesty* were presented for review. The committee charged the administration to continue to work with each level to tighten the language around AI. This evening, Digital Learning Coordinator Rebecca Savelkoul presented an overview of the work her office continues to lead around this learning tool. Her focus is continued professional development sessions for administrators and teachers. Finalized regulations will be presented later this school year.
- Mrs. Savelkoul presented the Instructional Technology Classroom Assistant job description. The potential for this position exists through restructuring the high school media center, as Mrs. Savelkoul oversees all library media specialists as a part of her position. Therefore, no new dollars are needed to fulfill the Instructional Technology Classroom Assistant. Instead, this new position reflects the ever-growing impact of technology on teaching and learning and continually balancing managing AI, multiple databases, providing professional development and supporting assistive technology.
- Interim Director of Pupil Services Amy Aresco introduced the new job description for Transition Department Leader. This stipend position is designed to be fulfilled by a current SPS employee or a person in search of part-time work. This Department Leader would be responsible for all related transition services and the STELLAR Program. As the performance indicators list, there are district leadership responsibilities, program oversight, community engagement and budget responsibilities. The position is annually contingent on grant funding.

- *Policy 6161.2 and R6161.2 – Library Collection Development and Maintenance Policy, Policy 6161.3 – Library Display and Program Policy, and Policy 6161.4, and R6161.4 – Library Material Review and Reconsideration*, were presented together. These policies and associated regulations are part of transparency in education and are mandatory adoptions. The administration explained that even though SPS has current policy for material review and reconsideration as illustrated in *Regulation 6144 Request for Re-Evaluation of Instructional Materials*, page 476 of Public Act 25-168 explicitly states the mandated adoption of *Policy 6161.4.*
- Revisions to *Policy 6154 and R6154 – Homework,* were reviewed. The suggested edits reflect current practice at the elementary, middle and high school levels. Good discussion ensued around Habits of Work versus graded homework. The edits proposed are the result of collaborative work from the administration of each level.
- *Policy 5131.7 – Restorative Practices Response* was reviewed as a required policy. This policy is part of the larger Climate Legislation and compliments language already adopted by last school year.
- Human Resource Manager Michelle Passamano presented revised job descriptions for Principal, Assistant Principal, Classroom Teacher, Paraeducator, and Applied Behavior Analysis (ABA) Therapist. The proposed revisions better reflect these positions as they have evolved since the last review, which for some span over 10 years ago. The committee was assured by administration that none of the edit's conflict with current collective bargaining agreements.
- Mrs. Passamano distributed a draft of an Employee Handbook and reviewed its organizational structure. The draft is a culmination of a year's long work, in effort to align BOE 4000 Policy Series with best practice. The committee agreed to review the first 25 pages of the handbook for discussion during the January policy meeting.
- The update around Oratorical Guidance was postponed until the January meeting.
- The dates for Policy & Personnel Committee Meetings for remainder of 2025-2026 School Year were reviewed.

The Committee agreed to forward all the agenda items above for full BOE review.

Meeting adjourned – 6:32 p.m.

Respectfully Submitted,

Frank Pepe

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only_____ Board Meeting Date December 2025

Decision Requested X Agenda Code 8 a

AGENDA REPORTING FORM

Agenda Topic: Personnel Report

Summary of Issue: This Personnel Report includes appointments, resignations, retirements, and transfers for certified and classified personnel for the 2025-2026 school year. This report includes activity for the month of November 2025.

Background: The human resource department provides the Board of Education with a monthly update of personnel additions/reductions/changes.

Alternative Strategies:

Cost (if applicable): N/A **Funding Source:** Board of Education

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Recommend that the Board of Education approve the Personnel Report as submitted by the human resource department.

Michele Passamano
Signature of Staff Member Submitting Report

Steven Madaras
Signature of Superintendent

Included:
Personnel Report

Personnel Report
November 2025

APPOINTMENTS

	NAME	POSITION	SCHOOL	FTE	EFFECTIVE	DEGREE	SALARY
CLASS	Audi, Angela	ABA Therapist, SLC	HES	1.0	12-8-2025	N/A	$21.13
CLASS	Becotte, Emma	Paraeducator	JAD	1.0	11-24-2025	N/A	$19.43
CERT	Galvez Aliaga, Solange	Spanish Teacher	JFK	1.0	11-24-2025	BA	$58,436
CLASS	Salerno-Gould, Emily	Paraeducator	KES	1.0	1-5-2026	N/A	$22.19
CLASS	Khounsak, Yessenia	Administrative Assistant	CO	1.0	12-4-2025	N/A	$29.23
CLASS	Klepps, Melissa	Paraeducator	FES	1.0	11-24-2025	N/A	$22.19
CLASS	Manseau, Jean	Paraeducator, PT	DES	0.88	11-19-2025	N/A	$19.43
CLASS	Meccariello, Mary	Clerk, PT	DES	0.43	11-17-2025	N/A	$18.39
CERT	Thom-Dunphy, Lisa	Special Education Teacher	HES	1.0	11-17-2025	BA	$52,572

**Mendez, Carmen – Rescinded Acceptance, reported on 11/13/25 Personnel Report*

RESIGNATIONS/RETIREMENTS

	NAME	POSITION	SCHOOL	EFFECTIVE	YRS	RET/RES
CERT	Burkell, Scott	Special Education Teacher	KSA	6-30-2026	33	RETIRE
CERT	Davenport, Lindsay	Science Teacher	JAD	12-11-2025	13	RESIGN
CLASS	Du Haynes, Chau Ngan	Paraeducator, FT	TES	11-30-2025	1	RESIGN
CLASS	Fontaine, Meredith	Administrative Assistant	SHS	11-22-2025	7 mo.	RESIGN
CLASS	Fusco, Victoria	BCBA	District	11-22-2025	3	RESIGN
CLASS	Levesque, Kathleen	Literacy & Numeracy Tutor	HES	11-26-2025	7 mo.	RESIGN
CLASS	Platt, Hannah	Paraeducator	OES	1-10-2026	1	RESIGN
CLASS	Pocock, Erika	Administrative Assistant	CO	12-12-2025	3	RESIGN
CLASS	Saqib, Farheen	Paraeducator, Pre-K	SES	11-27-2025	1 mo.	RESIGN
CLASS	Thom-Dunphy, Lisa	ABA Therapist, CLC	HES	11-14-2025	12	RESIGN
CLASS	Vale Vazquez, Shakyra	ANA Therapist, SLC	HES	11-26-2025	10 mo.	RESIGN

ASSIGNMENT CHANGE

	FROM (PREVIOUS ASSIGN)		TO (NEW ASSIGN)		
NAME	POSITION/SCHOOL	FTE	POSITION/SCHOOL	FTE	EFFECTIVE
Charrette, John	Custodian/JFK	1.0	Assistant Head Custodian/JFK	1.0	7-1-2025
Nelson, Elliot	Custodian/DES	1.0	Assistant Head Custodian/DES	1.0	7-1-2025
Yalanis, Christopher	Custodian/JAD	1.0	Assistant Head Custodian/JAD	1.0	7-1-2025

TRANSFERS

	FROM (PREVIOUS ASSIGN)		TO (NEW ASSIGN)		
CERT NAME	POSITION/SCHOOL	FTE	POSITION/SCHOOL	FTE	EFFECTIVE
None to report					

STIPENDS

COACHING

Resignations/Non-Renewals
None to report

Appointments
None to report

Personnel Report
November 2025

STIPENDS CONT.

OTHER

Resignations/Non-Renewals

Cahill, Effie	Extended School Year Director	District	RESIGN

Appointments

Lyles, Rachel	Therapy Department Lead	District	STIPEND
Plant, Daniel	Extended School Year Director	District	STIPEND

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ Board Meeting Date December 11, 2025

Decision Requested x Agenda Code 9 b.

AGENDA REPORTING FORM

Agenda Topic: **Capital Improvement Plan 2026-27 to 2030-31 Second Reading**

Summary of Issue: The proposed Capital Improvement Plan calls for $4,635,661 in 2026-27 and $263,674,728 over the next four years for a total of $268,310,389

Background: The Board prepares an updated five-year Capital Improvement Plan each year. Our requests are then combined with the town into a long-term Capital Improvement Plan presentation.

Alternative Strategies: Modify Plan as proposed.

Cost (if applicable): _____ **Funding Source:** Capital Budget

Beginning Date of Program or Project: July 1, 2026

Ending Date of Program or Project: June 30, 2031

Recommendation or Comment: Move to approve the Capital Improvement Plan 2026-27 to 2030-31 as presented by the Administration.

Kyle Fickel
_____
Signature of Staff Member Submitting Form

Peter Madany
_____
Signature of Staff Member Submitting Form

SOUTHINGTON PUBLIC SCHOOLS

Capital Improvement Plan
Five-Year Projection
2026/27 to 2030/31

Proposed Capital Improvement Projects
Five Year Plan - By Project

Site	Project Type / Description	Year of Request	2026/27	2027/28	2028/29	2029/30	2030/31	Total Request - Five Years
Air Conditioning- 5 Elementary Schools								
HVAC Improvements to Hatton, Oshana, South End, Strong and Thalberg		2022/23					15,750,000	15,750,000
	Subtotal		**-**	**-**	**-**	**-**	**15,750,000**	**15,750,000**
Boiler Project								
HES	Replace Boiler	2022/23				203,963		203,963
	Subtotal		**-**	**-**	**-**	**203,963**	**-**	**203,963**
Roofing Projects								
SEES	Replace Roofing, 57,800 SF	2026/27	2,980,588					2,980,588
	Subtotal		**2,980,588**	**-**	**-**	**-**	**-**	**2,980,588**
Vehicles								
DW	Ford F250 4WD Pickup Truck	2024/25	60,000					60,000
SPED	Ford T350 Passenger Van	2024/25	65,000					65,000
	Subtotal		**125,000**	**-**	**-**	**-**	**-**	**125,000**
SHS Athletic Facility Improvement Projects								
SHS	Replace Tennis Courts, Phase II	2021/22	793,420					793,420
SHS	Replace Home Bleachers and Press box	2026/27	300,000					300,000
	Subtotal		**1,093,420**	**-**	**-**	**-**	**-**	**1,093,420**
Technology								
DW	Technology/ Network Infrastructure Improvements	2026/27	436,653	808,825	857,503	653,748	400,689	3,157,418
	Subtotal		**436,653**	**808,825**	**857,503**	**653,748**	**400,689**	**3,157,418**
	Subtotal Board of Education Capital Improvement Plan		**4,635,661**	**808,825**	**857,503**	**857,711**	**16,150,689**	**23,310,389**
School Construction Projects								
KES	Phase III Elementary Projects Kelley- Revised 22-23	2018/19		71,700,000				71,700,000
SEES	Phase III Elementary Projects South End	2024/25		8,700,000				8,700,000
DES	Phase III Elementary Projects Derynoski- Revised 22-23	2018/19				77,000,000		77,000,000
KSA	Karen Smith Academy- Revised 22-23	2021/22				15,900,000		15,900,000
FES	Phase III Elementary Projects Flanders- Revised 22-23	2018/19					71,700,000	71,700,000
	Subtotal Phase III: Derynoski, Flanders & Kelley Building Projects		**-**	**80,400,000**	**-**	**92,900,000**	**71,700,000**	**245,000,000**
Grand Total Board of Education Capital Improvement Plan			**4,635,661**	**81,208,825**	**857,503**	**93,757,711**	**87,850,689**	**268,310,389**

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**AIR CONDITIONING - ELEMENTARY SCHOOLS**
		FISCAL YEAR PROPOSED:	**2030/31**

DESCRIPTION:

The Administration requested pricing to improve the HVAC systems at five elementary schools. The schools and the approximate cost to improve the HVAC systems are listed below.

School	Estimated Construction Cost	
Hatton Elementary	$	3,822,500
Oshana Elementary (A)	$	1,213,500
South End Elementary	$	1,760,000
Strong Elementary	$	3,287,500
Thalberg Elementary	$	3,220,500
TOTAL	**$**	**13,304,000**
Estimated Architectural costs	$	1,000,000
Subtotal	$	14,304,000
Add 10% contingency	$	1,446,000
Total Estimate for all schools	**$**	**15,750,000**

PROJECT COST: 15,750,000

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**BOILER PROJECT**
		FISCAL YEAR PROPOSED:	**2029/30**

DESCRIPTION:

2029/30
This Project would replace two (2) boilers at Hatton Elementary School, in accordance with the replacement schedule as advised by the Administration
$203,963

PROJECT COST: 203,963

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**ROOFING PROJECTS**
		FISCAL YEAR PROPOSED:	**2026/27**

DESCRIPTION:

2026/27
SEES- The roof at South End has been repaired numerous times since installation. This project would replace the 57,800 SF existing roof.
$2,980,588

PROJECT COST: 2,980,588

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**Vehicles**
		FISCAL YEAR PROPOSED:	**2025/26**

DESCRIPTION:

2026/27
Maintenance Vehicle- Pickup Truck
New Ford F-250 SuperCab, 4WD Pickup Truck for Maintenance Department. Of the 16 fleet vehicles, the average age is 10.8 years old with more than 50% of those rated less than good.

$60,000

2026/27
Special Education- Student Passenger Van
New Ford Passenger van for Special Education to replace 2012 Ford Econoline. In addition to its primary function with the STELLAR program, the van will be used to ensure compliance of student activity transition services across the district.

$65,000

PROJECT COST: 125,000

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**High School Athletic Facility Plan**
		FISCAL YEAR PROPOSED:	**2026/27**

DESCRIPTION:

2026/27

Athletic Facility Master Plan Improvements

Improvements to the Athletic Fields as outlined in the Field Turf proposal from July 2025. This includes the replacement of seven tennis courts.

Although the prior year Town Capital Plan provided $1,350,000 for replacement of the home bleachers, due to higher costs of raw materials (tariffs), additional funds will be necessary to complete the project.

Project	Cost	Funding Year
Tennis Court Replacement Phase II	$ 793,420	2026/27
Replace Home Bleachers and Press box	$ 300,000	2026/27

PROJECT COST: 1,093,420

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT: BOARD OF EDUCATION	**PROJECT TITLE:** Technology/ Network Infrastructure Improvements
	FISCAL YEAR PROPOSED: 2026/27, 2027/28, 2028/29, 2029/30, 2030/31

DESCRIPTION:

2026/27, 2027/28, 2028/29, 2029/30, 2030/31

Technology/ Network Infrastructure Improvements

Structured network hardware replacement plan of crucial infrastructure: network switches, wireless access points, battery backups, VM host networks, interactive displays, in order to maintain a secure, reliable, and high-performing technology environment within the district.

Technology Asset	Sum of Count	2026/27	2027/28	2028/29	2029/30	2030/31	TOTAL
Access Points*	172	$ 249,228					**$ 811,605**
	340		$ 561,865				
Battery Backup*	51			$ 79,000			**$ 79,000**
Displays	51	$ 187,425					**$ 1,301,858**
	64		$ 246,960				
	83			$ 336,290			
	38				$ 193,995		
	77					$ 336,875	
Labs	130			$ 150,491			**$ 308,507**
	130				$ 158,016		
Servers	1				$ 60,775		**$ 124,589**
	1					$ 63,814	
Switches*	48			$ 291,722			**$ 532,684**
	32				$ 240,962		
TOTALS	**1218**	**$ 436,653**	**$ 808,825**	**$ 857,503**	**$ 653,748**	**$ 400,689**	**$ 3,157,418**

* *E-Rate available*

PROJECT COST: 3,157,418

TOWN OF SOUTHINGTON

CAPITAL IMPROVEMENT PLAN

FISCAL YEAR 2026/27 THROUGH FISCAL YEAR 2030/31

DEPARTMENT:	**BOARD OF EDUCATION**	**PROJECT TITLE:**	**SCHOOL CONSTRUCTION PROJECTS**
		FISCAL YEAR PROPOSED:	**2026/27, 2028/29, 2030/31**

DESCRIPTION:

2026/27, 2028/29, 2030/31

Phase III Elementary Projects

Three elementary schools remain to be renovated as part of Phase III of the School Construction Projects. The Board of Education has been working with Colliers on a construction plan for each school. The below table shows estimated costs for each school, last updated in September 2024.

Location	Estimated Cost
Kelley Elementary School	$ 71,700,000
South End Elementary School	$ 8,700,000
Derynoski Elementary School	$ 77,000,000
Karen Smith Academy	$ 15,900,000
Flanders Elementary School	$ 71,700,000
Total	**$ 245,000,000**

Karen Smith Academy

The Board of Education is also developing a plan for constructing a new building for the Karen Smith Academy. The estimate was updated September 2024.

$15,900,000

PROJECT COST: 245,000,000

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10 a.

AGENDA REPORTING FORM

Agenda Topic: Policy 5131.7 – Restorative Practices Response - NEW - First Reading.

Summary of Issue: The Policy & Personnel Committee has reviewed Policy 5131.7 – Restorative Practices Response.

Background: The Policy and Personnel Committee reviews policies with the administration to ensure they are current and appropriate.

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Policy & Personnel Committee is bringing the draft Policy 5131.7 to the full Board for a First Reading.

Titles of Attachments:

1. DRAFT Policy 5131.7

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Policy 5131.7

Restorative Practices Response - New Policy

Draft

Series 5000: Students

RESTORATIVE PRACTICES RESPONSE

The Southington Board of Education (the "Board") is committed to identifying strategies to improve school climate, including, but not limited to, by responding to challenging behavior and implementing evidence and research-based interventions, including restorative practices. Restorative practices may be implemented by school employees for incidents of challenging behavior, bullying, and/or harassment in the school environment, or other forms of student conflict that is nonviolent and does not constitute a crime. Restorative practices shall not include the involvement of a school resource officer or other law enforcement official unless such challenging behavior or other conflict escalates to violence and/or constitutes a crime. In addition, the Southington Public Schools (the "District") shall address challenging behavior, bullying, and harassment in accordance with the Board's Student Discipline policy and any other applicable Board policy, administrative regulations, and/or school rules.

For purposes of this policy:

- "Restorative practices" means evidence and research-based system-level practices that focus on (A) building high-quality, constructive relationships among the school community, (B) holding each student accountable for any challenging behavior, and (C) ensuring each such student has a role in repairing relationships and reintegrating into the school community.

- "Challenging behavior" means behavior that negatively impacts school climate or interferes, or is at risk of interfering, with the learning or safety of a student or the safety of a school employee.

- "Bullying" means unwanted and aggressive behavior among children in grades kindergarten to twelve, inclusive, that involves a real or perceived power imbalance. "Bullying" includes "cyberbullying", which means any act of bullying through the use of the Internet, interactive and digital technologies, cellular mobile telephone or other mobile electronic devices or any other electronic communication.

- "School climate" means the quality and character of the school life, with a particular focus on the quality of the relationships within the school community, and which is based on patterns of people's experiences of school life and that reflects the norms, goals, values, interpersonal relationships, teaching, learning, leadership practices and organizational structures within the school community.

- "School climate improvement plan" means a building-specific plan developed by the school climate committee, in collaboration with the school climate specialist, using school climate survey data and any other relevant information, through a process that engages all members of the school community and involves such members in a series of overlapping systemic improvements, school-wide instructional practices and relational practices that prevent, identify and respond to challenging behavior, including, but not limited to, alleged bullying and harassment in the school environment.

- "School environment" means a school-sponsored or school-related activity, function or program, whether on or off school grounds, including at a school bus stop or on a school bus or other vehicle owned, leased or used by the Board, and may include other activities, functions or programs that occur outside of a school-sponsored or school-related activity, function or program if bullying at or during such other activities, functions or programs negatively impacts the school environment.

The Board directs the administration of the District to develop a continuum of strategies to prevent, identify, and respond to challenging behavior, bullying, and harassment. Such strategies shall include research-based interventions, including restorative practices, and may be included in each school's school climate improvement plan. Such strategies shall be shared with the school community, including, but not limited to, through publication in the relevant student handbook.

The Board further directs the Superintendent or designee to collect and maintain data regarding types of challenging behavior addressed using the Restorative Practices Response Policy and data concerning the implementation of restorative practices.

Legal References:

Conn. Gen. Stat. § 10-222aa

Conn. Gen. Stat. § 10-222dd

Conn. Gen. Stat. § 10-222jj

ADOPTED: December 2025

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10 b.

AGENDA REPORTING FORM

Agenda Topic: Policy 6154 – Homework - REVISED - First Reading.

Summary of Issue: The Policy & Personnel Committee has reviewed Policy 6154 – Homework.

Background: The Policy and Personnel Committee reviews policies with the administration to ensure they are current and appropriate.

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Policy & Personnel Committee is bringing the draft Policy 6154 to the full Board for a First Reading.

Titles of Attachments:

1. DRAFT Policy 6154

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Policy 6154
Homework - Revised Policy
Draft

Series 6000: Instruction

Instructional Arrangements

Homework

Homework is an extension of clearly defined classroom activities and should be appropriate to the age, ability, and level of independence of students. Teachers should assign meaningful homework that aligns with the established curriculum ~~is consistent with student goals, and district improvement plans~~ In addition to assigned homework, students are encouraged to read independently throughout the week for the purpose of enhancing literacy skills.

The purpose of homework is to:

- Foster lesson enrichment
- Prepare for new knowledge
- Strengthen ~~and teach~~ the application of basic skills
- Review and practice skills ~~that have been~~ previously taught
- Monitor progress for each student.

Additional benefits of homework

- Develop initiative, responsibility, and self-direction
- Build and implement independent study skills
- Teach budgeting of study time
- Build confidence by ensuring successful learning experiences
- ~~Provide assessment for both teacher and student~~
- ~~Promote parent/guardian understanding of the curriculum~~

Policy Adopted: May 1989
Policy Reviewed: October 2002
Policy Revised: June 2012
Policy Revised: December 2025

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10 c.

AGENDA REPORTING FORM

Agenda Topic: Policy 6161.2 – Library Collection Development and Maintenance Policy - NEW - First Reading.

Summary of Issue: The Policy & Personnel Committee has reviewed Policy 6161.2 – Library Collection Development and Maintenance Policy.

Background: The Policy and Personnel Committee reviews policies with the administration to ensure they are current and appropriate.

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Policy & Personnel Committee is bringing the draft Policy 6161.2 to the full Board for a First Reading.

Titles of Attachments:

1. DRAFT Policy 6161.2

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Policy 6161.2

Library Collection Development and Maintenance Policy - Revised Policy

Draft

SERIES: 6000 INSTRUCTION

LIBRARY COLLECTION DEVELOPMENT AND MAINTENANCE POLICY

The Southington Board of Education recognizes that library and other education materials should be provided for the interest, information and enlightenment of all students, and represent a wide range of varied and diverging viewpoints in the collection as a whole.

Students shall have access to the library and other educational material that is relevant to the research, independent reading interests and educational needs of students based on a student's age, development or grade level.

The library media center is an important place for voluntary inquiry, the dissemination of information and ideas, and the promotion of free expression and free access to ideas by students.

A school library media specialist is professionally trained to curate and develop a collection that shall provide students with access to the widest array of age-appropriate and grade level-appropriate library and other educational material.

The Southington Board of Education directs the Superintendent to create an administrative regulation that establishes a procedure for a certified school library media specialist to continually review library and other educational material within a school library media center using professionally accepted standards which shall include, but need not be limited to: the material's relevance, physical condition of the material, availability of duplicates or copies of the material, availability of more recent age-appropriate or grade-level appropriate material and continued demand for the material.

Legal Reference: Public Act 25-168 An Act Concerning the State Budget for the Biennium Ending June 30, 2027, and Making Appropriations Therefor, and Provisions Related to Revenue and Other Items Implementing the State Budget.

Legal Reference: PA 25-168, Section 321

Policy adopted: December 2025

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10 d.

AGENDA REPORTING FORM

Agenda Topic: Policy 6161.3 – Library Display and Program Policy - NEW - First Reading.

Summary of Issue: The Policy & Personnel Committee has reviewed Policy 6161.3 – Library Display and Program Policy.

Background: The Policy and Personnel Committee reviews policies with the administration to ensure they are current and appropriate.

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Policy & Personnel Committee is bringing the draft Policy 6161.3 to the full Board for a First Reading.

Titles of Attachments:

1. DRAFT Policy 6161.3

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Policy 6161.3

Library Display and Program Policy - New Policy

Draft

Series 6000: Instruction

Library Display and Program Policy

Library displays and student programs are critical in serving as resources for voluntary inquiry and the dissemination of information and ideas, as well as promoting free expression and free access to ideas by students.

The Southington Board of Education recognizes that library displays are provided for the interest, information and enlightenment of all students, represent a wide range of varied and diverging viewpoints, and provide access to content that is relevant to the research, independent interests and educational needs of students.

The Southington Board of Education acknowledges that a school library media specialist is professionally trained to curate and develop displays and programs that shall provide students with access to the widest array of age-appropriate and grade-level-appropriate library and other educational materials.

Legal Reference: Public Act 25-168 An Act Concerning the State Budget for the Biennium Ending June 30, 2027, and Making Appropriations Therefor, and Provisions Related to Revenue and Other Items Implementing the State Budget.

Policy adopted: **December 2025**

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10 e.

AGENDA REPORTING FORM

Agenda Topic: Policy 6161.4 – Library Material Review and Reconsideration - NEW - First Reading.

Summary of Issue: The Policy & Personnel Committee has reviewed Policy 6161.4 – Library Material Review and Reconsideration.

Background: The Policy and Personnel Committee reviews policies with the administration to ensure they are current and appropriate.

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Policy & Personnel Committee is bringing the draft Policy 6161.4 to the full Board for a First Reading.

Titles of Attachments:

1. DRAFT Policy 6161.4

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Policy 6161.4

Library Material Review and Reconsideration - New Policy

Draft

Series 6000: Instruction

Library Material Review and Reconsideration Policy

The Southington Board of Education understands that, on occasion, a member of the public will wish to lodge a complaint against instructional material used in the classroom or available in the school library/media center. Consideration of requests to reconsider and remove material, displays, or student programs, is limited to individuals with a vested interest. An individual with vested interest may challenge any library and other educational materials, display or student program by initiating a review of such material via the submission of a request for reconsideration form.

It shall be the policy of the Southington Board of Education that the removal, exclusion or censoring of any book shall not occur on the sole basis that a person with a vested interest finds such book offensive. No library and other educational material, display or program shall be removed from library media centers, or programs be canceled, because of the origin, background or viewpoints expressed in such material, display or program or because of the origin, background or viewpoints of the creator of such material, display or program. Library and other educational materials, displays and student programs shall only be excluded for legitimate pedagogical purposes or for professionally accepted standards of collection maintenance practices as adopted in the collection development and maintenance policy or the display and program policy.

Until a final decision is made by the review committee any library and other educational material being challenged shall remain available in the school library media center according to such material's catalog record and be available for a student to reserve, check out or access.

A school district may consolidate any requests for review and reconsideration of the same challenged library and other educational material. Once a decision has been made by the review committee on any library and other educational material, such material cannot be subject to a new request for review and reconsideration for a period of three years.

The Southington Board of Education will review and update this policy as necessary every five years.

Definitions

"Library and other educational material" means any material belonging to, on loan to or otherwise in the custody of a school library media center, including, but not limited to, nonfiction and fiction books, magazines, reference books, supplementary titles, multimedia and digital material, software and other material not required as part of classroom instruction.

"School library staff member" means a school library media specialist, school librarian, any certified or non-certificated staff member whose assignment is in the school library or any individual carrying out or assisting with the functions of a school library media specialist or school librarian.

Series 6000: Instruction

Library Material Review and Reconsideration Policy

"Individual with a vested interest" means any school staff member employed by a local or regional board of education, parent or guardian of a student currently enrolled in a school at the time a reconsideration form is filed and any student currently enrolled in a school at the time a reconsideration form is filed.

"Remove" means deliberately taking library material out of a library's collection. **"Remove"** does not include the process of clearing such collection of any materials that are no longer useful.

Material Review and Reconsideration Procedure

The Board of Education has established the following procedure for addressing complaints regarding the utilization of library and other educational materials:

1. Individuals with a vested interest may initiate the review or reconsideration of any library and other educational materials, display or student program by submitting a request for recommendation form to the principal of the school in which the library and other education material is being challenged.

2. The Principal, or the Principal's designee, shall promptly forward the request for reconsideration to the Superintendent of Schools for the school district.

3. The Superintendent, or the Superintendent's designee, shall appoint a review committee consisting of:

a. The Superintendent, or the Superintendent's designee

b. the Principal of the school in which the library and other educational material is being challenged, or the Principal's designee

c. the Director of Curriculum, or a person in an equivalent

d. a representative from the local or regional board of education

e. at least one grade-level-appropriate teacher familiar with the library material, provided the teacher selected is not the individual who submitted the form

f. a parent or guardian of a student age thirteen years or younger enrolled in the school district, provided the parent or guardian selected is not the individual who submitted the form

g. a parent or guardian of a student age fourteen years or older enrolled in the school district, provided the parent or guardian selected is not the individual who submitted the form

h. a certified school librarian employed by such board or employed by another board of education in the state.

In cases where such form is submitted by a student enrolled in grades nine to twelve, inclusive, and when appropriate and at the discretion of the superintendent, a student enrolled in grades nine to twelve, inclusive, may serve on the review committee if such student did not submit the reconsideration form, provided the superintendent consults with the principal of the school involved in such reconsideration request prior to making this determination whether to include such student on the review committee.

4. The review committee shall evaluate the request for reconsideration form by reading the challenged material in its entirety and evaluating the challenged material against the school district's Collection Development and Maintenance Policy.

5. The review committee shall make a written decision on whether to remove the challenged material within sixty school days from the date of receiving such request and provide a copy of the committee's decision and report to the individual with a vested interest who submitted the form and to the principal of the school.

6. The individual with a vested interest who submitted the request for reconsideration form may appeal to the review committee's decision to the local or regional board of education for the school district. The Board shall determine whether the reconsideration process was followed and publish the decision on the Internet website of the school district.

General Provisions

Any school library media specialist or school library staff member who, in good faith, implements the policies described in this section shall be immune from any liability, civil or criminal, that might otherwise be incurred or imposed and shall have the same immunity with respect to any judicial proceeding that results from such implementation.

Legal Reference: Public Act 25-168 An Act Concerning the State Budget for the Biennium Ending June 30, 2027, and Making Appropriations Therefor, and Provisions Related to Revenue and Other Items Implementing the State Budget.

Policy adopted: December 2025

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.1.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Instructional Technology Classroom Assistant - NEW.

Summary of Issue: Approval of Job Description – Instructional Technology Classroom Assistant - NEW.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Frank Ryan
Signature of Staff Member Submitting Report

Peter Madaras
Signature of Superintendent of Schools

Instructional Technology Classroom Assistant - NEW

SOUTHINGTON Public Schools

Job Description

TITLE: **INSTRUCTIONAL TECHNOLOGY CLASSROOM ASSISTANT**

REQUIRED QUALIFICATIONS:

1. Bachelor's Degree
2. Strong technology skills, including educational software, word processing, database, spreadsheet, web development, presentation, and digital video/audio editing.
3. Experience using and/or training in systems such as PowerSchool, Google Apps for Education, and OneDrive

PREFERRED QUALIFICATIONS:

1. A valid Connecticut teaching certificate in any area
2. Experience providing technology-based professional development
3. Experience with methods for integrating technology into the curriculum such as asynchronous and synchronous learning, learning management systems (LMS), document sharing, and digital assessment
4. Ability to collect and analyze data from a variety of sources and make recommendations

REPORTS TO: Digital Learning Coordinator

JOB GOAL: Work with the Digital Learning Coordinator to support the integration of technology in classrooms and support structures necessary to improve learning with digital tools.

PERFORMANCE RESPONSIBILITIES:

1. Collaborate with the Technology Leadership Team and Curriculum Coordinators to support teaching and learning.
2. Study, evaluate, and, as appropriate, recommend to the Digital Learning Coordinator instructional technology platforms/tools.
3. Collaborate with the District Instructional Technology Committee for the use and training in Generative AI.
4. Assist teachers in special education to support assistive technology uses in the classroom.
5. Assist schools and classroom teachers with technology uses in the classroom.
6. Conduct staff training workshops, as needed
7. Maintain database of instructional tools and access levels.
8. Manage a calendar of meetings and assist with scheduling.
9. Prepare communications regarding district technology.
10. Troubleshoot learning platforms to assist teachers and students with access and use issues.

SALARY: $25 per hour/27.5 hours per week

October, 2025
Policy Committee:
Board of Education Approval:

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.2.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Transition Department Leader - NEW.

Summary of Issue: Approval of Job Description – Transition Department Leader - NEW.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Transition Department Leader - NEW

SOUTHINGTON Public Schools

JOB DESCRIPTION

TITLE: **Transition Department Leader**

QUALIFICATIONS:

1. Demonstrated knowledge of transition services, IDEA regulations, and best practices in preparing students for postsecondary opportunities.
2. Experience in program leadership, staff supervision, and interagency collaboration.
3. Strong organizational, communication, and grant-writing skills.
4. Ability to build and maintain positive relationships with staff, families, and community partners.

REPORTS TO:
Special Education Coordinator or his/her designee

JOB GOAL:
The district is seeking a **Transition Department Leader** to support and advance transition programming for students with disabilities. This stipend position provides leadership, coordination, and oversight of districtwide transition services and the Stellar Transition Program.

PERFORMANCE RESONSIBILITIES:

Districtwide Leadership

- Serve as a districtwide resource on transition planning policy, compliance, and updates.
- Support teachers with resources and strategies to promote student involvement in IEPs and transition services.
- Develop and facilitate transition-related professional development opportunities for school staff.
- Attend transition PPT meetings as appropriate.
- Organize and oversee dual enrollment opportunities, student job shadows at SHS, shadow days, and parent information nights.

Approved by Policy and Personnel
Approved by the Board of Education

Program Oversight & Supervision

- Oversee daily operations of the Stellar Transition Program.
- Supervise program teaching staff.
- Supervise the Job Coach, including holding bi-monthly Job Coach meetings.
- Ensure implementation of a clear and consistent referral process for Stellar.

Program Development & Community Engagement

- Lead efforts in grant writing, including IDEA Part B, to secure funding for transition initiatives.
- Foster community partnerships and coordinate job shadowing, vocational opportunities, and student placements.
- Serve as a liaison with landlords, overseeing facility needs, maintenance, and technology.

Budget & Operations

- Manage program budget and purchasing, including ordering of supplies and resources.
- Oversee vanshare program, including van maintenance, driver training, medical clearance, and emergency form compliance.
- Ensure strong communication and operational systems that support safe and effective transportation.

TERMS OF EMPLOYMENT:
Annual appointment by Board of Education

EVALUATION:
Performance to be evaluated annually by Special Education Coordinator or his/her designee.

Approved by Policy and Personnel
Approved by the Board of Education

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.3.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Principal - REVISED.

Summary of Issue: Approval of Job Description – Principal - REVISED.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Principal - REVISED

JOB DESCRIPTION

TITLE: **PRINCIPAL**

QUALIFICATIONS:

1. Connecticut Intermediate Administrator Certification (092).
2. ~~Experience in teaching~~ Successful teaching experience at the elementary or secondary level.
3. Demonstrated knowledge of current educational practices, ~~and theory in education~~ curriculum, assessment, and instructional leadership.
4. Strong interpersonal communication and organizational skills.
5. Experience with data-driven decision-making, staff supervision, and school improvement planning preferred.

REPORTS TO:
Superintendent of Schools or ~~his/her~~ designee

SUPERVISES:
~~The~~ All school programs, activities, personnel and school operations.

JOB GOAL:
~~To provide administrative and instructional leadership required for the operation of a contemporary elementary school, within the policies established by the Board of Education and implemented by the Superintendent of Schools.~~ Provide visionary leadership and effective management that ensures a safe, inclusive, and engaging learning environment where all students achieve academic and personal success. The principal is responsible for implementing district policies, leading continuous school improvement, and collaborating with staff, families, and the community to advance the mission of the Southington Public Schools.

PERFORMANCE RESONSIBILITIES:

~~1. Ensure the safety of all students, staff, and visitors within the building and on school grounds.~~
~~2. Develop and implement contemporary education programs.~~
~~3. Develop, implement and evaluate curriculum.~~
~~4. Schedule, supervise and evaluate certified and classified personnel.~~
~~5. Select and assign all staff members.~~
~~6. Maximize staff utilization.~~
~~7. Encourage cooperative leadership of students in worthwhile activities of school life.~~
~~8. Promote and supervise co-curricular activities.~~
~~9. Promote and maintain high standards of student conduct.~~
~~10. Develop and encourage a viable parent/teacher organization.~~
~~11. Promote positive community relations.~~
~~12. Prepare and submit the school's budgetary requests and monitor the expenditure of approved funds.~~
~~13. Chair, and/or participate in team meetings as required.~~
~~14. Supervise building and equipment maintenance.~~
~~15. Perform any and all related other duties assigned by the Superintendent of Schools.~~

1. Ensure a safe, supportive, and equitable learning environment for all students, staff, and visitors.

2. Provide instructional leadership focused on high-quality teaching, learning, and assessment.
3. Lead the development, implementation, and continuous improvement of curriculum and instructional programs.
4. Select, assign, supervise, and evaluate certified and classified personnel to promote professional growth and excellence.
5. Facilitate professional learning and collaboration among staff to support effective instructional practices.
6. Foster a positive school climate that promotes respect, responsibility, and high expectations for all.
7. Support and promote student engagement through co-curricular and extracurricular opportunities.
8. Maintain consistent standards of student conduct and support positive behavior interventions.
9. Strengthen partnerships with parents, caregivers, and community organizations to enhance student learning and well-being.
10. Communicate effectively with staff, students, families, and the community regarding school goals, programs, and progress.
11. Develop, manage, and monitor the school's budget in alignment with district priorities and goals.
12. Oversee building operations, facilities, and resources to ensure a safe and effective learning environment.
13. Lead and participate in school and district committees, team meetings, and initiatives as required.
14. Use data to guide decision-making, evaluate school programs, and monitor student achievement.
15. Perform other related duties as assigned by the Superintendent of Schools or designee.

TERMS OF EMPLOYMENT:
In accordance with the working agreement between the Southington Board of Education and the Southington Administrators Association.

EVALUATION:
Performance to be evaluated annually by the Superintendent of Schools or his/her designee.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.4.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Assistant Principal - REVISED.

Summary of Issue: Approval of Job Description – Assistant Principal - REVISED.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Frank Ryan
Signature of Staff Member Submitting Report

Peter Madanes
Signature of Superintendent of Schools

Assistant Principal - REVISED

SOUTHINGTON Public Schools

JOB DESCRIPTION

TITLE: **ASSISTANT PRINCIPAL**

QUALIFICATIONS:

1. Connecticut Intermediate Administrator Certification (092).
2. Successful teaching experience at the elementary or secondary level.
3. Demonstrated knowledge of current educational practices, curriculum, assessment, and instructional leadership ~~and theory in elementary education~~.
4. Strong interpersonal communication and organizational skills.
5. Experience with data-driven decision-making, staff supervision, and school improvement planning preferred.

REPORTS TO:
Principal

SUPERVISES:
~~All~~ School programs, activities, and personnel as directed by the principal.

JOB GOAL:
~~To ensure the smooth operation of the school in order to increase the effectiveness of the school's programs for each individual student.~~ Provide leadership and support in the administration, supervision, and coordination of school programs, operations, and personnel to ensure a safe, inclusive, and effective learning environment that promotes the academic and social-emotional growth of all students. Support the principal's vision for the school.

PERFORMANCE RESPONSIBILITIES:

~~1. To assume the role of the principal in his/her absence.~~
~~2. To assist the principal in organizing and administering the elementary school.~~
~~3. To assist the principal in implementing and evaluating the educational program.~~
~~4. To assist the principal in selecting and assigning staff members.~~
~~5. To assist the principal in supervising and evaluating certified and classified personnel.~~
~~6. To assist the principal with the responsibility for student management.~~
~~7. To assist the principal in preparing and implementing the school budget.~~
~~8. To chair planning and placement team meetings as required.~~
~~9. To assist the principal in overseeing the maintenance and operation of the building and grounds.~~
~~10. To assist the principal in interpreting the school's programs for parents and citizens of the community.~~
~~11. To assume such related duties and responsibilities as assigned by the principal.~~

1. Serve as acting principal in the absence of the principal.
2. Assist the principal in the daily administration and operation of the school.
3. Support the implementation, supervision, and evaluation of instructional programs.
4. Participate in the recruitment, selection, assignment, supervision, and evaluation of staff.
5. Assist with the development and monitoring of the school budget and allocation of resources.
6. Support student management, including discipline, attendance, and behavior interventions that promote positive school climate.

7. Assist in coordinating building operations, safety protocols, and maintenance of facilities and grounds.
8. Foster communication and collaboration among students, staff, parents, and the broader community.
9. Promote professional learning and growth among staff.
10. Participate in the development and implementation of school improvement and district initiatives.
11. Perform other duties as assigned by the principal.

TERMS OF EMPLOYMENT:
In accordance with the working agreement between the Southington Board of Education and the Southington Administrators Association.

EVALUATION:
Performance to be evaluated by the building principal.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.5.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Classroom Teacher - REVISED.

Summary of Issue: Approval of Job Description – Classroom Teacher - REVISED.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Frank Ryan
_____
Signature of Staff Member Submitting Report

Ken Madancy
_____
Signature of Superintendent of Schools

Classroom Teacher -REVISED

SOUTHINGTON Public Schools

JOB DESCRIPTION

TITLE: **CLASSROOM TEACHER**

QUALIFICATIONS:

1. Holds appropriate ~~area~~ Connecticut teaching certification for the assigned grade and/or subject.
2. Demonstrates the ability to work cooperatively and effectively with ~~staff~~ students, colleagues, and families.
3. Demonstrates ~~facility~~ proficiency in ~~the skills of reading, writing and mathematics~~ literacy, numeracy, and communication skills.
4. ~~Demonstrates knowledge of the subject taught~~ Possesses strong knowledge of subject matter and current instructional practices.
5. Demonstrates ~~knowledge~~ understanding of human growth and development ~~as it relates to the teaching-learning process~~ and its relationship to teaching and learning.

REPORTS TO:
Principal or Assistant Principal

JOB GOAL:
~~To design and carry out instructional activities that will help and motivate students to learn the identified curriculum of the Southington Public Schools, and to contribute to the students' development as mature, able and responsible members of society.~~ Provide engaging, effective instruction that supports all students in achieving the goals of the Southington Public Schools' curriculum and fosters their growth as responsible, capable, and confident learners and citizens.

PERFORMANCE RESPONSIBILITIES:

~~1. Plans instruction to achieve selected objectives.~~
~~2. Maintains a safe and orderly classroom environment.~~
~~3. Effectively implements instructional plans and uses appropriate instructional techniques related to student needs.~~
~~4. Effectively communicates with students.~~
~~5. Maintains high expectations and motivates students.~~
~~6. Demonstrates knowledge of assigned subject content and effective teaching experience.~~
~~7. Helps students develop a positive self-concept.~~
~~8. Effectively organizes and uses time, space, materials, and equipment for instruction.~~
~~9. Effectively monitors students' understanding by offering regular appropriate feedback.~~
~~10. Effectively uses student evaluation testing results to plan instruction.~~
~~11. Encourages and maintains the cooperative involvement and support of parents and the community.~~
~~12. Takes responsibility for his/her own professional growth and development.~~
~~13. Performs any and all other related duties assigned by the building principal.~~

1. Plans and delivers instruction aligned with the district curriculum and student learning goals.
2. Establishes and maintains a safe, respectful, and positive classroom environment conducive to learning.
3. Differentiates instruction to meet diverse student needs, abilities, and interests.
4. Demonstrates effective communication with students, colleagues, and families.

Revised 03-14-96; 10-8-25
Approved by BOE:

5. Maintains high expectations for student achievement and behavior.
6. Applies content expertise and evidence-based instructional strategies to promote student learning.
7. Supports students' social, emotional, and academic development and fosters positive self-esteem.
8. Organizes and manages time, space, materials, and technology to maximize learning.
9. Monitors student progress and provides timely, constructive feedback.
10. Uses assessment data to inform planning, instruction, and intervention.
11. Promotes collaboration and positive relationships with parents, families, and the broader school community.
12. Engages in continuous professional growth and development.
13. Performs other duties as assigned by the building principal.

TERMS OF EMPLOYMENT:
In accordance with the agreement between the Southington Board of Education and the Southington Education Association.

EVALUATION:
Performance to be evaluated annually by the building principal.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.6.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Paraeducator - REVISED.

Summary of Issue: Approval of Job Description – Paraeducator - REVISED.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Frank Ryan
_____
Signature of Staff Member Submitting Report

Ken Madaras
_____
Signature of Superintendent of Schools

Paraeducator -REVISED

SOUTHINGTON Public Schools

JOB DESCRIPTION

TITLE: ~~PARAPROFESSIONAL~~ PARAEDUCATOR

QUALIFICATIONS:

1. ~~High School Graduate,~~ Associate degree or ~~60 credits post High School~~ a minimum of 60 college credits required. A passing ~~grade~~ score on the ~~Praxis™~~ ParaPro ~~examination~~ assessment ~~may~~ can be substituted for the ~~Associates Degree~~ degree/credit requirement.
2. ~~Some~~ Basic computer skills ~~desirable.~~ required; proficiency with educational technology preferred.
3. ~~Ability to work well with children and staff.~~ Demonstrated ability to work collaboratively and effectively with students and staff.
4. ~~Lifting ability may be necessary.~~ Ability to assist students with physical needs, including lifting and mobility support, as required.

REPORTS TO:
Building principal or designee.

JOB GOAL:
~~To~~ Carryout instructional activities designed by certified teachers to help students achieve their academic, social/emotional and behavioral potential.

PERFORMANCE RESPONSIBILITIES:

1. ~~Assist individual students or small groups of students to reinforce learning of material or skills~~ Provide instructional support to individual students or small groups to reinforce learning initially introduced by the teacher.
2. ~~Check and record notebooks, workbooks, homework assignments, test results, attendance forms, money collections, etc.~~
3. Assist teacher in daily classroom routine as necessary.
4. ~~Assist, when necessary, the supervision of students~~ Supervise students in various settings, including classrooms, hallways, cafeterias, playgrounds, and during arrival/dismissal.
5. Implement behavior support plans or behavior intervention plans.
6. Collect and input data as directed by certified staff.
7. Assist students in preparation and execution of independent study projects, enrichment work, and remedial work as assigned by the teacher.
8. ~~Assist students in effective use of a media center, including locating reference material, aiding student book selections and reading to students.~~
9. ~~Assist school library/media specialist when necessary.~~
10. Assist ~~special needs~~ students with special needs in physical tasks as necessary. Tasks ~~could~~ may include, but are not limited to, lifting, positioning, movement from location, lavatory and toileting needs, lunch and feeding needs, accompanying student on field trips.

Rev. 3-14-96, 4/12/07; 10/15/25
Approved by Policy Committee 4/12/07
Accepted by Union 4/26/07
Approved by the Board of Education 4/26/07

11. Actively participate in creating a positive school ~~environment~~ climate.
12. Perform other related duties as assigned by the building principal, or designee.

TERMS OF EMPLOYMENT:
Determined by the working agreement between the Southington Board of Education and the ~~Southington Paraprofessional Union (CSEA/SEIU Local 2001)~~ United Public Service Employees Union (UPSEU).

EVALUATION:
Performance of the job will be evaluated annually by the building principal, or designee.

Rev. 3-14-96, 4/12/07; 10/15/25
Approved by Policy Committee 4/12/07
Accepted by Union 4/26/07
Approved by the Board of Education 4/26/07

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ **Board Meeting Date** December 11, 2025

Decision Requested X **Agenda Code** 10 f.7.

AGENDA REPORTING FORM

Agenda Topic: Approval of Job Description – Applied Behavior Analysis (ABA) Therapist - REVISED.

Summary of Issue: Approval of Job Description – Applied Behavior Analysis (ABA) Therapist - REVISED.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** _____

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: Move that the Board of Education approve the job description presented by the administration.

Titles of Attachments:
1. Job Description

Frank Ryan
Signature of Staff Member Submitting Report

Peter Madanes
Signature of Superintendent of Schools

Applied Behavior Analysis (ABA) Therapist -REVISED

SOUTHINGTON Public Schools

JOB DESCRIPTION

TITLE: **Applied Behavior Analysis (ABA) Therapist**

QUALIFICATIONS:

1. ~~Desire to work with students.~~ High school diploma required; Associate degree preferred.
2. ~~Flexible, highly motivated.~~ Experience or demonstrated interest in working with students with developmental, behavioral, or learning difficulties.
3. Physically able to ~~shadow students~~ support and model skills ~~in~~ across all learning environments~~, including~~ (classroom, gym~~s~~, playground~~s~~, community settings).
4. Able to model skills including gross motor, fine motor, play and social skills.
5. ~~Required to participate in and be assessed on explicit training modules in applied behavioral analysis in the areas of academic, social, behavioral, and self-help skills as assigned by certified teaching staff (This may include hours beyond the typical work day. Additional remuneration at hourly rate will be provided in these cases).~~
6. ~~An Associate's degree or higher is preferred.~~

REPORTS TO:
~~Special Education Coordinator~~ Building principal or designee

JOB GOAL:
~~To provide supervised instruction and facilitate learning of developmental academic skills, social and behavioral skills, and self-help skills to students in need of discrete trial training and generalization of skills.~~ Provide instructional and behavioral support under the supervision of certified and/or licensed staff to help students acquire and generalize academic, behavioral, social and self-help skills through the principles of Applied Behavior Analysis.

PERFORMANCE RESPONSIBILITIES:

1. Effectively communicate with certified teaching staff, related services staff, and board certified behavior analyst (BCBA) about student performance and progress in academic, behavioral, social, and self-help areas.
2. Implement discrete trial instruction designed by certified staff and BCBA with assigned students.
3. Implement behavior intervention plans that are designed by the teacher and BCBA to reinforce appropriate behaviors and eliminate inappropriate behaviors, including disruption, aggression, or bolting.
4. Collect and input student level data ~~into an electronic database~~ as directed by certified staff, ~~including~~ and/or the BCBA.
5. Conduct observation based assessments under the supervision of the BCBA.
6. Develop student-centered materials under the direction of certified or licensed staff (e.g., picture exchange, visual schedules).
7. Participate in parent training meetings with certified and/or licensed staff.

8. Perform all tasks under the direct supervision of certified special education staff and/or BCBA.
9. Perform other duties relating to student needs assigned by certified staff, ~~including~~ and/or the BCBA.
10. Required to work for up to six weeks during the summer in extended school year programs, when needed.
11. ~~Required to participate yearly in a training session on behavioral de-escalation strategies and physical management techniques (This may include hours beyond the typical work day. Additional remuneration at hourly rate will be provided in these cases).~~ Participate annually in training on behavior de-escalation and physical management techniques (training may occur beyond the typical workday; additional compensation will be provided).

TERMS OF EMPLOYMENT:
~~This is a school year plus, hourly, non-union position~~ Determined by the working agreement between the Southington Board of Education and the United Public Service Employees Union (UPSEU).

EVALUATION:
To be evaluated annually by ~~a Special Education Coordinator~~ the building principal or designee.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. g.

AGENDA REPORTING FORM

Agenda Topic: K-5 Health – New Course Curriculum - First Reading.

Summary of Issue: K-5 Health – New Course Curriculum - First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the K-5 Health – New Course Curriculum – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

SOUTHINGTON Public Schools

Kindergarten Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1 & 2	Ready, Set GO! A Journey to Health	Describe habits that improve individual health such as getting enough sleep, eating nutritious foods, and exercising; learn the importance of respectful communication and forming positive friendships.	1.2.2 Recognize that there are multiple dimensions of health.
3 & 4	Every Journey Needs a Guide	Name people who can provide health care guidance such as parents, family members, other trusted adults, teachers, and health care professionals. Learn the importance of respectful communication and forming positive friendships.	5.2.2 Differentiate between situations when a health-related decision can be made individually or when assistance is needed. 6.2.2 Identify who can help when assistance is needed to achieve a personal health goal.
5	The Five Senses	Identify and demonstrate use of the five senses.	4.2.2 Demonstrate listening skills to enhance health.
6 & 7	Brushing and Flossing	Learn proper techniques for good oral health.	7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health.

8	The Dentist	Understand the importance of regular oral health checkups.	1.2.5 Describe why it is important to seek health care.
9	Tooth-Friendly Food & Drink	Identify the effect of various types of food on oral health.	8.2.1 Make requests to promote personal health.
10	What is Mental Health?	Develop and use appropriate skills to identify and manage conditions related to mental health and wellness; Discuss and explain how thoughts and emotions are related.	4.2.1 Demonstrate healthy ways to express needs, wants, and feelings.
11	My Space	Identify appropriate personal boundaries, privacy, and space; Identify roles and characteristics of a trusted adult; Identify and role play refusal skills such as saying "no" to protect personal space and to avoid unsafe situations.	4.4.2 Demonstrate ways to tell a trusted adult if threatened or harmed.

SOUTHINGTON Public Schools

First Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	CATCH MVP Healthy Habits	Describe personal hygiene and health habits that enhance individual health such as hand washing, oral hygiene, and getting enough sleep.	1.2.1 Identify that healthy behaviors impact personal health.
2	Health Check-ups	Identify types of healthcare professionals and describe the services they provide such as medical checkups, dental exams, and vision and hearing screenings.	1.2.5 Describe why it is important to seek health care. 3.2.2 Identify ways to locate school and community health helpers. 5.2.1 Identify situations when a health-related decision is needed.
3	Fun Ways to Exercise	Describe what physical activity is and why it's important. Identify and participate in various forms of physical activity that can be applied at home.	1.2.2 Explain the importance of choosing healthy foods and daily physical activity.
4	Gobble, Gobble, GO!	Identify food groups and the types of foods that help the body grow, including fruits and vegetables, dairy, and protein.	7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health.
5 & 6	Oral Health Care	Practice proper techniques for good oral health. Explain that you have to floss once a day to clean between teeth.	7.2.1 Identify practices and behaviors that support the health and well-being of self and others.
7	The Dentist	Describe the dentist as a doctor who cares for your teeth.	3.2.1 Identify characteristics of trusted adults and other individuals who support health and well-being.
8	Germs	Learning about germs and how they spread.	1.2.1 Identify that healthy behaviors impact personal health. 7.2.1 Identify practices and behaviors that support the health and well-being of self and others.

9 & 10	Avoiding Danger	Identify the purpose and demonstrate the proper use of protective equipment such as seat belts, booster seats, and bicycle helmets; Describe the difference between safe and unsafe environments; Describe unsafe situations.	1.2.4 List ways to prevent common childhood injuries.
11	The Power of the Sun & Safe Summer	Describe habits that improve individual health; identify the purpose and use of protective safety equipment; review the difference between safe and unsafe environments.	7.2.2 Demonstrate behaviors that avoid or reduce health risks. 6.2.1 Identify a short-term personal health goal and take action toward achieving the goal. 8.2.1 Make a request to promote personal health.

SOUTHINGTON Public Schools

Second Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Germ Busters	Discuss ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization; Identify common illnesses and diseases, including asthma, diabetes, and epilepsy, and their symptoms.	1.2.3 Describe ways to prevent communicable diseases.
2	Bitty Bugs	Describe where head lice and biting insects that may cause illness, including ticks and mosquitos, are commonly encountered and the signs and symptoms of illness that may occur from contact with them.	7.2.2 Demonstrate behaviors that avoid or reduce health risks.
3	Eat The Rainbow	Explain that fruits, protein, vegetables and dairy provide essential vitamins and minerals.	8.2.2 Encourage peers to make positive health choices.
4	Water-Go! Sugar-Woah!	Identify ingredients that make foods and drinks unhealthy such as added sugar and other sweeteners; Demonstrate an understanding that the human body is composed mostly of water and explain the importance of drinking water daily; Identify the benefits of making healthy beverage choices, including water and milk, and limiting sweetened beverages such as soda and sports drinks.	7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health.
5	Let's Go Exercising & Energy Balance	Describe habits that improve individual health such as getting enough sleep, eating nutritious foods, and exercising	6.2.1 Identify a short-term personal health goal and take action toward achieving the goal.
6	Beware of Portion Size	Identify healthy portion sizes for common food items; Explain how media can influence an individual's health choices such as television advertisements for fast foods and breakfast cereals	2.2.3 Describe how the media can influence health behaviors. 7.2.2 Demonstrate behaviors that avoid or reduce health risks.

7	Food Sensitivity	Describe basic facts of food allergy safety such as not sharing food; Explain the importance of respecting others who have allergies and know when and how to seek help in a food-related emergency	5.2.1 Identify situations when a health-related decision is needed.
8	Body Systems	Examine the structure, function, and relationships of body systems and their relevance to personal health.	1.2.2 Recognize that there are multiple dimensions of health. 4.2.2 Demonstrate listening skills to enhance health.
9	Taking Care of Myself	Discuss the signs and symptoms associated with negative stress such as loss or grief; Identify positive and negative stressors and how they impact emotions and learning; Describe and practice calming and self-management strategies	4.2.1 Demonstrate healthy ways to express needs, wants, and feelings. 5.2.2 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.
10	Caring for Others	Identify and practice ways to solve conflicts with friends and peers; Discuss how to treat peers with different learning needs with dignity and respect; Explain the effect of peer influence on an individual's social and emotional health	2.2.1 Identify how the family influences personal health practices and behaviors.
11	Personal Safety Plan	Recall parents'/caregivers' phone numbers and home address as part of a personal safety plan	4.2.4 Demonstrate ways to tell a trusted adult if threatened or harmed.

SOUTHINGTON Public Schools

Third Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Why I'm a CATCH MVP	Explain the physical, mental, and social benefits of fitness. Describe the importance of goal setting and set goals for making healthy food choices and achieving appropriate levels of physical activity.	1.5.2 Identify examples of emotional, intellectual, physical, and social health.
2 & 3	What's Contagious?	Explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization. Identify common vectors, including ticks and mosquitos, and explain how and when to perform a self-check for vectors.	1.5.4 Describe ways to prevent common childhood injuries and health problems. 7.1.5 Demonstrate practices and behaviors that reduce or prevent health risks.
4	Physical Activity Means Go!	Explain the physical, mental, and social benefits of fitness.	1.5.2 Identify examples of emotional, intellectual, physical, and social health.
5	Brain Development	Discuss and explain how the brain develops during childhood and the role the brain plays in behavior. Define sources of stress, including trauma, loss, and grief.	2.5.2 Identify the influence of culture on health practices and behaviors.
6 & 7	Taking Care of Your Brain & Body	Identify ways to express and manage overwhelming emotions without harming oneself, others, or property such as calming strategies or talking to a parent or another trusted adult. Describe and practice healthy behaviors that reduce stress. Describe situations that call for professional mental health services. Discuss healthy alternatives to harming oneself , others, or property and the importance of telling a parent or another trusted adult when someone is struggling to manage overwhelming emotions or lacks support	1.5.2 Identify examples of emotional, intellectual, physical, and social health.

8 & 9	Substance Misuse	Identify the difference between safe and unsafe substances. Define what medicine is and explain that medicine should only be used with adult permission and supervision.	8.1.5 Give factual information to improve the health of self and others.
10	Caring Communities	Demonstrate strategies for resolving conflict. Describe strategies to support others in managing different learning needs. Identify factors such as school climate and safety measures that affect an individual's physical, emotional, and social health.	1.5.3 Describe ways in which safe and healthy school and community environments can promote personal health. 2.5.1 Describe how family influences personal health practices and behaviors.
11	My Space	Differentiate between healthy and unhealthy relationships. Demonstrate effective strategies to address conflict. Identify refusal skills such as saying "no" when privacy, personal boundaries, or personal space are not respected.	4.5.3 Demonstrate nonviolent strategies to manage or resolve conflict.

SOUTHINGTON Public Schools

Fourth Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1 & 2	Fire Prevention	Understand and explain the key fire prevention messages. Identify and demonstrate safe behaviors that prevent injury and promote personal health.	1.5.1: Describe the relationship between healthy behaviors and personal health. 7.5.2: Demonstrate behaviors that avoid or reduce health risks.
3	You to the Rescue	Demonstrate safety and first aid knowledge to prevent and treat injuries. Identify and demonstrate strategies for preventing and responding to injuries. Develop a home-safety and emergency response plan such as a fire safety plan.	5.5.1 Identify health-related situations that might require a thoughtful decision.
4 & 5	Healthy Me	Understand strategies for maintaining personal hygiene and health habits. Identify decision-making skills that promote individual, family, and community health. Identify examples of emotional, intellectual, physical, and social health. Describe the relationship between healthy behaviors and personal health. Identify the influence of culture on health practices and behaviors.	1.5.1 Describe the relationship between healthy behaviors and personal health. 2.5.4 Describe how the school and community can support personal health practices and behaviors.
6	Body Systems	Identify and describe the primary functions and major components of body systems and understand their relevance to personal health.	7.5.3 Demonstrate a variety of behaviors to avoid or reduce health risks.
7	Clean Body, Healthy Smile	Identify the importance of taking personal responsibility for developing and maintaining personal hygiene and health habits.	7.5.2 Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health.
8 & 9	Injury Prevention	Demonstrate safety knowledge and responsible decision-making skills to prevent injuries and accidents.	7.5.3 Demonstrate a variety of behaviors to avoid or reduce health risks. 1.5.4 Describe ways to prevent common childhood injuries and health problems.

10	Say No to Bullying	Describe how to effectively respond to bullying of oneself or others. Explain consequences that result from bullying as well as identify methods available to report bullying. Describe the negative impact bullying has on both the victim and the bully.	2.5.3 Identify how peers can influence healthy and unhealthy behaviors.
11	Bullying Scenarios	Describe how to effectively respond to bullying of oneself or others. Explain consequences that result from bullying. Identify methods available to report bullying; Describe the negative impact bullying has on both the victim and the bully.	2.5.3 Identify how peers can influence healthy and unhealthy behaviors.

SOUTHINGTON Public Schools

Fifth Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Nutrients Get Us GO-ing!	Explain why the body needs each of the six major nutrients contained in foods.	4.5.1 Demonstrate effective verbal and nonverbal communication skills to enhance health.
2	The Whole Truth about Foods	Explain why the body needs each of the six major nutrients contained in foods. Identify and categorize foods based on saturated and unsaturated fat content.	8.5.1 Express opinions and give accurate information about health issues. 5.5.3 List healthy options to health-related issues or problems.
3	Take Out the Sugar and Caffeine	Identify the recommended guidelines for added sugar consumption and explain how excess sugar consumption can impact health, including causing dental cavities and obesity. Identify caffeine content of common beverages and health concerns associated with excess caffeine consumption.	3.5.2 Locate resources from home, school, and community that provide valid health information.
4	Knowing What You Eat	Identify nutritional information on menus and food labels. Describe the importance of accessing health information through a variety of credible health resources. Describe how healthy and unhealthy behaviors affect body systems and demonstrate refusal skills in dealing with unhealthy eating situations.	3.5.1 Identify characteristics of valid health information, products, and services. 4.5.2 Demonstrate refusal skills that avoid or reduce health risks. 2.5.5 Explain how media influences thoughts, feelings, and health behaviors. 5.5.5 Choose a healthy option when making a decision.
5	Health Options	Explain the importance of health information and how to seek assistance in making decisions about health. Describe how health care decision making is influenced by external factors such as cost and access. Identify how to distinguish between myth and fact when accessing information about health.	2.5.2 Identify the influence of culture on health practices and behaviors. 4.5.4 Demonstrate how to ask for assistance to enhance personal health.

6	Dealing with Illness	Explain how to manage common minor illnesses such as colds and skin infections. Distinguish between communicable and noncommunicable illnesses. Explain actions to take when illness occurs, including asthma, diabetes, and epilepsy.	1.5.5 Describe when it is important to seek health care.
7	Disease and Allergy Awareness	Describe the connection between physical activity & dietary choices with the prevention of obesity, heart disease, and diabetes. Identify the common food allergens listed on food packaging.	7.5.1 Identify responsible personal health behaviors. 5.5.4 Predict the potential outcomes of each option when making a health-related decision.
8	Goal Setting for a Lifetime of Health	Describe the importance of goal setting and set goals for making healthy food choices and achieving appropriate levels of physical activity.	6.5.1 Set a personal health goal and track progress toward its achievement. 6.5.2 Identify resources to assist in achieving a personal health goal.
9 & 10	Substance Misuse	Describe the physiological effects of alcohol, vaping products, tobacco, and dangerous substances.	5.5.3 List healthy options to health-related issues or problems.
11	Online Safety	Identify appropriate ways to communicate in digital and online environments & discuss who is appropriate to communicate with and what is appropriate information to share in digital and online environments. Explain the benefits of identity protection in digital and online environments. Analyze distinguishing characteristics of cyberbullying.	2.5.6 Describe ways that technology can influence personal health.
12	Decision Making	Understand what decision making is and identify the steps in making a smart decision. Practice making thoughtful choices through role-play and discussion.	5.4.5 Identify options and their potential outcomes when making a health-related decision.
13	Growth and Development	I can identify the basic parts of the human reproductive system and describe their functions, and I can explain how hormones play a role in the changes that happen during puberty.	1.1.5 Describe basic reproductive parts and their functions. 1.2.5 Explain common human sexual development and the role of hormones.

Elementary Health Education

SPS Curriculum and Instruction- Fall 2025

SOUTHINGTON
Public Schools

CATCH

Coordinated Approach To Child Health

Built-In Educator Support

- ✓ Lessons are accessible through a user-friendly online platform designed for educators
- ✓ Each lesson includes presentation slides with a slide-by-slide script
- ✓ Tools and strategies to support both formal and informal assessment of student development
- ✓ Year-round opportunities for professional development and continous virtual support

- **Health Ed Journeys is a comprehensive K-8 Health curriculum that aligns with national SHAPE standards, as well as Connecticut's Healthy and Balanced Living Framework.**
- **Curriculum is backed by 120 peer reviewed scientific articles.**

Curriculum Components

- Age-appropriate lessons that emphasize skill building, real world application, and integrate movement and physical activity
- Organized into grade bands and delivered through instructional units focused on a key health topic
- Student Activity Sheets that encourage self-reflection and setting personal health goals
- Each lesson can be taught in a single class session or broken into "bite-size pieces" of approximately 10 minutes each

Key Health Topics

- Foundational Health
- Nutrition & Physical Activity
- Physical Health & Hygiene
- Mental Health & Wellness
- Substance Misuse Prevention
- Injury Prevention & Safety

Health Education Standards

- A quality health curriculum begins with the standards
- The National Health Ed. Standards were recently updated (Jan. 2024)
    - CT State Health Ed. Standards are aligned with the National Standards (May 2022)

The Standards Driving Our Curriculum:

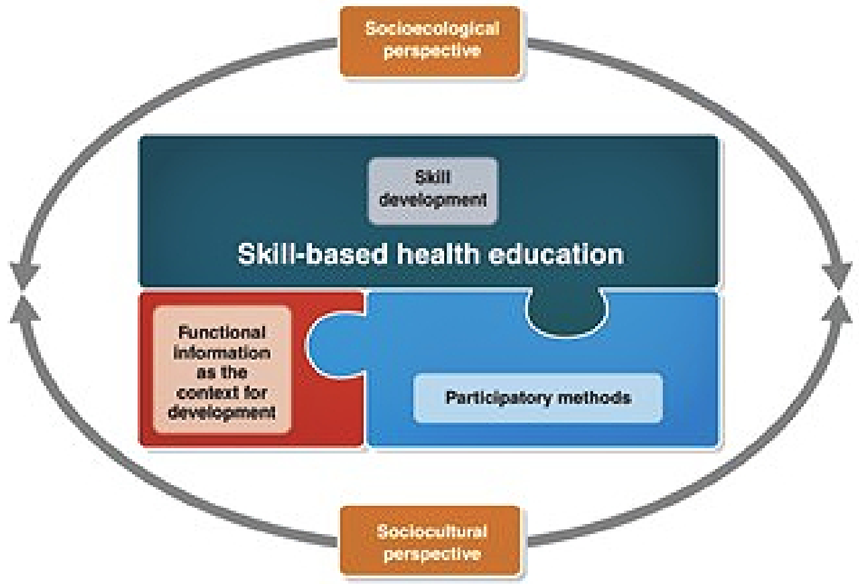
- Standard 1: Concepts/Functional Health Info.
- Standard 2: Analyzing Influences
- Standard 3: Accessing Valid Health Info.
- Standard 4: Interpersonal Communication
- Standard 5: Decision Making
- Standard 6: Goal Setting
- Standard 7: Self-Management
- Standard 8: Advocacy

WHAT IS SKILLS-BASED HEALTH EDUCATION?

- Skills-based, not content based

- Skill development is the **FOUNDATION** of instruction
    - Students have multiple opportunities to practice the skill(s) throughout each lesson

- Content is the **CONTEXT** for teaching skills
    - The skill is taught through the topic/content



Kindergarten

Each lesson includes:

- Two skills-based learning activities
- End of Lesson Quiz

OVERVIEW: Throughout the marking period, kindergarten students will develop foundational health and wellness skills by learning about sleep, exercise, nutrition, oral hygiene, and respectful communication. Instruction will also emphasize identifying trusted health helpers, understanding personal space, and fostering emotional regulation to support positive mental health.

Lessons:

Lessons 1 & 2: A Journey to Health: Sleeping, exercise, nutrition, etc.
Lessons 3 & 4: Every Journey Needs a Guide
Lesson 5: The Five Senses
Lessons 6 & 7: Brushing & Flossing
Lesson 8: The Dentist
Lesson 9: Tooth Friendly Food & Drink
Lesson 10: What is Mental Health?
Lesson 11: My Space

SOUTHINGTON Public Schools

Kindergarten Health Scope and Sequence

	Lesson	Objectives	National Hea Standards
1 & 2	Ready, Set GO! A Journey to Health	Describe habits that improve individual health such as getting enough sleep, eating nutritious foods, and exercising; learn the importance of respectful communication and forming positive friendships.	1.2.2 Recognize tha there are multiple dimensions of healt
3 & 4	Every Journey Needs a Guide	Name people who can provide health care guidance such as parents, family members, other trusted adults, teachers, and health care professionals. Learn the importance of respectful communication and forming positive friendships.	5.2.2 Differentiate between situations when a health-relate decision can be mad individually or when assistance is needed 6.2.2 Identify who c help when assistanc needed to achieve a personal health goal
5	The Five Senses	Identify and demonstrate use of the five senses.	4.2.2 Demonstrate

Grade One

OVERVIEW: The first-grade health curriculum focuses on developing foundational health and wellness habits through lessons on personal hygiene, regular health check-ups, physical activity, nutrition, and oral care. Students learn to identify healthy behaviors, recognize the role of healthcare professionals, and practice daily routines that promote lifelong well-being and self-care.

Lessons:

Lesson 1 : Healthy Habits
Lesson 2: Health Check-ups
Lesson 3: Fun Ways to Exercise
Lesson 4: Gobble, Gobble, Go!-Identifying food groups
Lessons 5 & 6: Oral Health Care
Lesson 7: The Dentist
Lesson 8: Germs
Lesson 9 & 10: Avoiding Danger
Lesson 11: The Power of the Sun

SOUTHINGTON Public Schools

First Grade Health Scope and Sequence

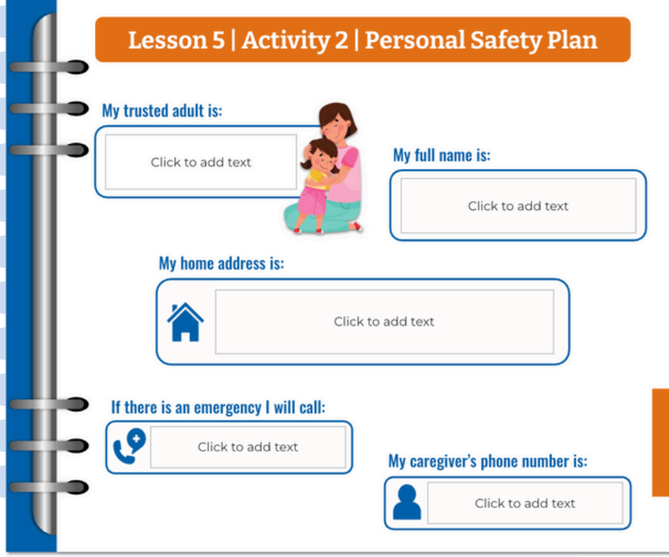
	Lesson	Objectives	National Health Standards
1	CATCH MVP Healthy Habits	Describe personal hygiene and health habits that enhance individual health such as hand washing, oral hygiene, and getting enough sleep.	1.2.1 Identify that healthy behaviors impac personal health.
2	Health Check-ups	Identify types of healthcare professionals and describe the services they provide such as medical checkups, dental exams, and vision and hearing screenings.	1.2.5 Describe why it is important to seek health care. 3.2.2 Identify ways to locate school and community health helpers. 5.2.1 Identify situations when a health-rela decision is needed.
3	Fun Ways to Exercise	Describe what physical activity is and why it's important. Identify and participate in various forms of physical activity that can be applied at home.	1.2.2 Explain the importance of choosing healthy foods and daily physical activity.

Grade Two

OVERVIEW: The second-grade health curriculum emphasizes disease prevention, nutrition awareness, and the development of healthy lifestyle habits. Students explore how germs spread, practice personal hygiene, make informed food and beverage choices, and understand the benefits of physical activity and rest. The lessons promote responsibility for personal health and encourage positive decision-making for overall well-being.

Lessons:

Lesson 1 : Germ Busters
Lesson 2: Bitty Bugs
Lesson 3: Eat The Rainbow (Nutrition)
Lesson 4: Water-Go! Sugar-Woah!
Lesson 5: Let's Go Exercising
Lesson 6: Beware of Portion Sizes
Lesson 7: Food Sensitivity
Lesson 8: Body Systems
Lesson 9: Taking Care of Myself
Lesson 10: Caring for Others
Lesson 11: Personal Safety Plan



SOUTHINGTON Public Schools

Second Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Germ Busters	Discuss ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization; Identify common illnesses and diseases, including asthma, diabetes, and epilepsy, and their symptoms.	1.2.3 Describe ways to prevent communicable diseases.
2	Bitty Bugs	Describe where head lice and biting insects that may cause illness, including ticks and mosquitos, are commonly encountered and the signs and symptoms of illness that may occur from contact with them.	7.2.2 Demonstrate behaviors that avoid or reduce health risks.
3	Eat The Rainbow	Explain that fruits, protein, vegetables and dairy provide essential vitamins and minerals.	8.2.2 Encourage peers to make positive health choices.

Grade Three

OVERVIEW: The third-grade health curriculum emphasizes physical fitness, emotional regulation, and responsible decision-making to support overall wellness. Students learn about the benefits of exercise, goal setting, and hygiene practices that prevent illness. Lessons also address mental health awareness, conflict resolution, healthy relationships, and the safe use of substances, empowering students to make informed, respectful, and health-conscious choices.

Lessons:

Lesson 1 : Why I'm a CATCH MVP (Benefits of fitness, goal setting)
Lessons 2 & 3: What's Contagious
Lesson 4: Physical Activity Means Go!
Lesson 5: Brain Development
Lessons 6 & 7: Taking Care of Your Brain & Body
Lessons 8 & 9: Substance Misuse
Lesson 10: Caring Communities
Lesson 11: My Space

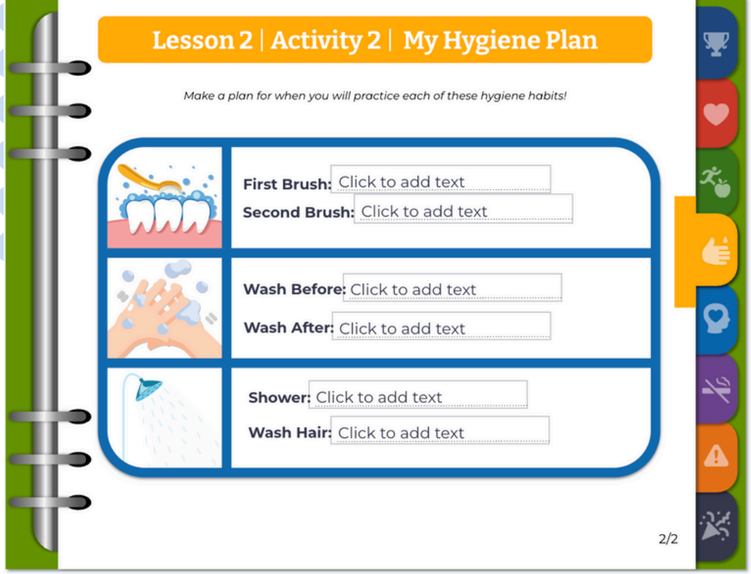
SOUTHINGTON Public Schools

Third Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Why I'm a CATCH MVP	Explain the physical, mental, and social benefits of fitness. Describe the importance of goal setting and set goals for making healthy food choices and achieving appropriate levels of physical activity.	1.5.2 Identify examples of emotional, intellectual, physical, and social health.
2 & 3	What's Contagious?	Explain ways in which germs are transmitted, methods of preventing the spread of germs, and the importance of immunization. Identify common vectors, including ticks and mosquitos, and explain how and when to perform a self-check for vectors.	1.5.4 Describe ways to prevent common childhood injuries and health problems. 7.1.5 Demonstrate practices and behaviors that reduce or prevent health risks.
4	Physical Activity	Explain the physical, mental, and social benefits of fitness.	1.5.2 Identify examples of emotional, intellectual, physical, and social health.

Grade Four

OVERVIEW: This fourth grade curriculum empowers students to develop essential health and safety skills by exploring personal hygiene, injury prevention, and home emergency planning. Students will also examine the role of healthy decision-making, understand body systems, and learn strategies to recognize and respond to bullying, fostering overall physical, emotional, and social well-being.



Lessons:

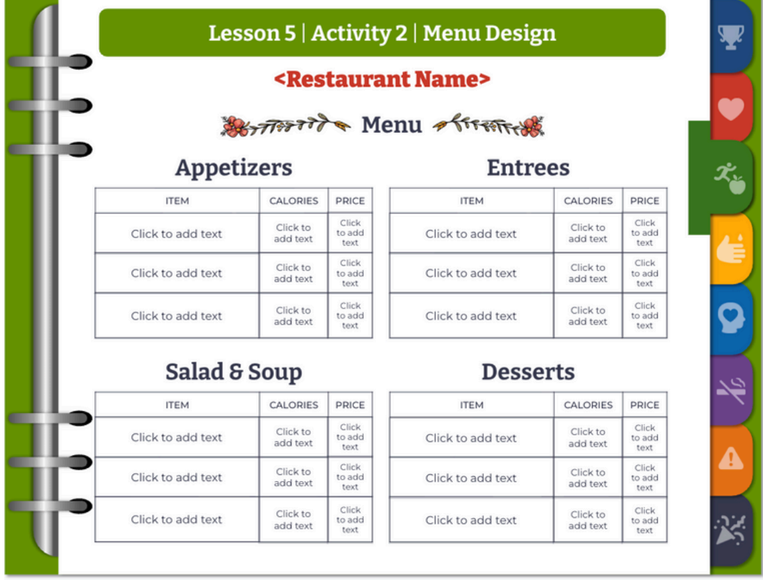
Lessons 1 & 2: Fire Prevention
Lesson 3: You to the Rescue
Lessons 4 & 5: Healthy Me
Lesson 6: Body Systems
Lesson 7: Clean Body, Healthy Smile
Lessons 8 & 9 : Injury Prevention
Lesson 10: Say No to Bullying
Lesson 11: Bullying Scenarios

SOUTHINGTON Public Schools

Fourth Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1 & 2	Fire Prevention	Understand and explain the key fire prevention messages. Identify and demonstrate safe behaviors that prevent injury and promote personal health.	1.5.1: Describe the relationship between healthy behaviors and personal health. 7.5.2: Demonstrate behaviors that avoid or reduce health risks.
3	You to the Rescue	Demonstrate safety and first aid knowledge to prevent and treat injuries. Identify and demonstrate strategies for preventing and responding to injuries. Develop a home-safety and emergency response plan such as a fire safety plan.	5.5.1 Identify health-related situations that might require a thoughtful decision.
4 & 5	Healthy Me	Understand strategies for maintaining personal hygiene and health habits. Identify decision-making skills that promote individual, family, and community health.	1.5.1 Describe the relationship between healthy behaviors and personal health. 2.5.4 Describe how the school and

Grade Five



OVERVIEW: This fifth grade curriculum equips students with the knowledge and skills to make informed health decisions, emphasizing nutrition, physical activity, and the management of common illnesses. Students explore the effects of substances, understand reproductive health and puberty, and develop digital safety and cyberbullying awareness. The curriculum also fosters goal setting, critical thinking, and responsible decision-making to promote overall physical, emotional, and social well-being.

Lessons:

Lesson 1 : Health Options
Lesson 2: Dealing with Illness
Lesson 3: Nutrients Get Us Going
Lesson 4: The Whole Truth about Foods
Lesson 5: Take Out the Sugar and Caffeine
Lesson 6: Knowing What You Eat
Lesson 7: Disease and Allergy Awareness
Lesson 8: Goal Setting for a Lifetime of Health
Lessons 9 & 10: Substance Misuse
Lesson 11: Online Safety
Lesson 12: Decision Making
Lesson 13: Growth and Development

SOUTHINGTON Public Schools

Fifth Grade Health Scope and Sequence

	Lesson	Objectives	National Health Standards
1	Health Options	Explain the importance of health information and how to seek assistance in making decisions about health. Describe how health care decision making is influenced by external factors such as cost and access. Identify how to distinguish between myth and fact when accessing information about health.	2.5.2 Identify the influence of culture on health practices and behaviors. 4.5.4 Demonstrate how to ask for assistance to enhance personal health.
2	Dealing with Illness	Explain how to manage common minor illnesses such as colds and skin infections. Distinguish between communicable and noncommunicable illnesses. Explain actions to take when illness occurs, including asthma, diabetes, and epilepsy.	1.5.5 Describe when it is important to seek health care.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. h.

AGENDA REPORTING FORM

Agenda Topic: Grade 6 Science – New Course Curriculum - First Reading.

Summary of Issue: Grade 6 Science – New Course Curriculum - First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the Grade 6 Science – New Course Curriculum – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Unit Overview	
Unit Title:	Light and Matter (OpenSciEd Unit 6.1)
Author(s):	Lindsay Davenport
Grade Level/Course:	Grade 6/Science
Length/Dates:	7 weeks (approximate timeline is September - Mid-October)
Unit Summary: 2-4 sentences describing the main ideas, content and skills of the unit.	This unit on light and matter begins with a perplexing phenomenon of one-way mirrors and how this material can act as both a mirror and a window at the same time. Through various investigations, students explain how light on either side of a material changes the light input entering the eyes, which affects what we see. By the end of the unit, students apply these science ideas to explain why window glass can act like a one-way mirror in certain light conditions.

Performance Expectations *(This unit builds toward these performance expectations)*
MS-PS4-2: Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. MS-LS1-8: Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

SEP Implications (Science and Engineering Practices)	**DCI Implications (Disciplinary Core Ideas)**	**CCC Implications (Cross Cutting Concepts)**
Asking Questions and Defining Problems: This unit **intentionally develops** this practice. Students ask "what happens if" questions to guide initial investigations with the box models in Lesson 2. They co-construct an experimental, testable question to guide a controlled investigation in Lesson 3. They ask "how" and "why" questions to motivate investigations and to explain the phenomenon (Lessons 4-7). Three Asking Questions Tools are provided to scaffold asking different kinds of questions.	**PS4.B. When light shines on an object, it is reflected, ~~absorbed,~~ or transmitted through the object, depending on the object's material ~~and the frequency (color) of the light.~~** Students investigate using the box model, readings, videos, and data collected with light sensors to develop a robust model and explanation for how light interacts with an object's material. This unit does not address absorption of light, which is taken up in the *Cup Design Unit*. Should you teach *Cup*	**Systems and Systems Models:** This unit **intentionally develops** this crosscutting concept. In this unit, students analyze the phenomenon to consider the components, interactions, and processes of the system, and how changes to light and changes to the material affect what is seen. Students zoom into different parts of the whole system to

- *Open and Closed Questions (Asking Questions Tool)*: Use this tool to support students in revising close-ended questions into open-ended ones. Avoid using it when students first offer questions for the DQB. Rather, use it later in a unit to transform close-ended questions into open-ended ones to investigate together.
- *Testable Questions (Asking Questions Tool)*: Use this tool to support students in asking testable questions that include enough specific information that one could gather evidence (e.g., measurements, observations) to answer the question. Note that this tool includes testable questions that are not specifically experimental ones, but ones that can be answered by gathering empirical evidence.
- *Experimental Questions (Asking Questions Tool)* Use this tool to support students in asking experimental questions in which they will need to manipulate a variable in the system to observe its relationship to other variables.

Developing and Using Models: This unit **intentionally develops** this practice. In the first lesson, students discuss how to use physical models to test ideas about a phenomenon (i.e., the box model) and how to use diagrammatic models to represent and explain the phenomenon. They contrast the real-world system they are trying to understand (i.e., two rooms in the video) with their box models to consider limitations of physical models. In subsequent lessons, students discuss representation choices for diagrammatic models, such as using symbols and colors, and what these representations communicate about the phenomenon. New elements of modeling that emerge in 6-8th grades that are developed in this unit include modeling parts of the system at unobservable scales, including unobservable mechanisms that explain observable phenomena (e.g., light reflecting off microscopic, half-silvered, one-way mirror film) in Lesson 4, and modifying a model to match if a variable is changed (e.g., changing the light conditions or swapping the one-way mirror for glass) (Lesson 8).

Constructing Explanations and Designing Solutions. This unit **intentionally develops** constructing written explanations. In Lesson 7 students develop a written explanation for the phenomenon. First, they collaboratively write an explanation to one of their questions, with the teacher modeling how to write an explanation supported by a how and why account and evidence. Then students independently write an

Design Unit next, Lesson 8 in this unit offers a bridge in the form of a related phenomenon. The phenomena in this unit can be explained using a ray model for light, thus a wave model and different frequencies of light are not developed until 8th grade in the OpenSciEd Scope and Sequence. This is a notable omission given the overarching Performance Expectation for the unit. Until students develop a deep understanding of waves, including frequency and amplitude, they are at a disadvantage for developing a wave model for light. Students will engage deeply with wave models in the *Sound Unit* unit. Thus, expanding the wave model from sound to light in the *Space Unit* makes sense. The *Space Unit* is also an ideal placement for these DCI elements as students to develop a wave model of light which has more explanatory power in the study of space-related phenomena.

PS4.B. The path that light travels can be traced as straight lines, except at surfaces between different transparent materials (e.g., air and water, air and glass) where the light path bends. This unit engages students using the idea that light travels in straight lines to model the one-way mirror phenomenon. There are Building Prerequisite Understandings offered in Lesson 2 to support students further with this concept. Students develop an understanding of refraction of light in Lesson 6 as they notice the bending of light through the lens of the eye to focus light on the retina. Students model how light bends at the surface of the lenses. Extension Opportunities are provided to enhance your students' experiences with refraction at surfaces between air, water, and glass.

LS1.D. Each sense receptor responds to different inputs (electromagnetic, ~~mechanical, chemical~~), transmitting them as signals that travel along nerve ~~cells~~ to the brain. The signals are then processed in the brain~~, resulting in immediate behaviors or memories~~. In lesson 6 students develop an understanding of how eyes sense light inputs and transmit them as signals to the brain. Due to the different amounts of light entering the eye, some signals register as stronger or weaker ones. The unit does not address nerve cells because cells will be investigated later in the 6th grade sequence. Instead, students learn about the "optic nerve" connecting eyes

investigate subsystems (e.g., the one-way mirror material; the eye and brain system). By the conclusion of the unit, students will have a better understanding of what constitutes a *system* and will have iteratively developed a *systems model* that describes how light interacts with objects and how reflected light is an input into the eye.

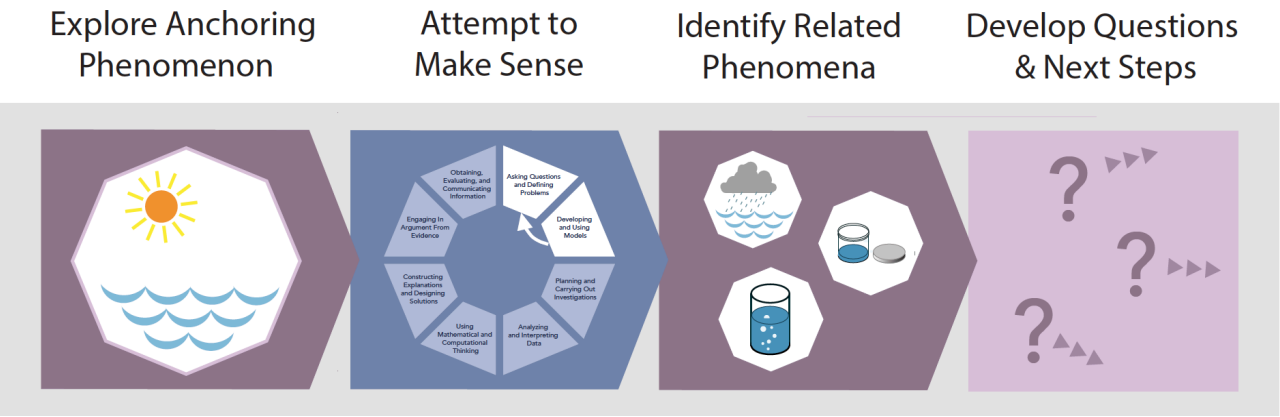
Structure and Function: This unit **intentionally develops** this crosscutting concept. Students consider how the shape and composition of key components in the system (e.g., one-way mirror material, eye lens) help determine the function of those components. Students investigate the microscale composition (structure) of the one-way mirror, and figure out that the one-way mirror is designed with half-silvering, which affects the amount of light transmitted and reflected. Students explore the shapes and components of the human eye to understand how light inputs are processed into what we see. Students learn that the lens of the eye, because of its structure (shape and composition), refracts light to a point on the retina, where light signals are changed into electrical signals that are sent to the brain along the optic nerve.

This crosscutting concept is also **key to the sensemaking** in this unit.

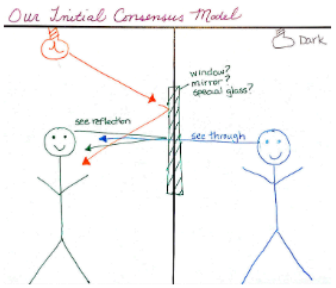
- Cause and Effect

explanation for a second question about the phenomena, receive feedback from the teacher and peers, and revise their explanations.	to the brain. Students will not figure out how the brain responds in terms of reflex or memories.	

Phenomenon



Unit Question: Why do we sometimes see different things when looking at the same object?

Driving Questions	Lesson Level Phenomena	Activity	Learning Targets
Learning Set 1 (Lessons 1-8):			
LESSON 1 4 days **How can something act like a mirror and a window at the same time?** Anchoring Phenomenon	 *A piece of material looks like a mirror from one side and a window from the other side.*	We watch a puzzling video of a music student who can see his reflection in what seems to be a mirror. The student doesn't see the teacher on the other side of the mirror, but the teacher can see through it like a window. We wonder how something can act like a mirror and window at the same time. We investigate the system using a box model that represents it. We develop an Initial Class Consensus Model, brainstorm related phenomena, and develop a Driving Question Board and an Ideas for Investigation chart. We figure out these things: • Some materials can be reflective and see-through at the same time. • Whether the material is reflective or see-through may be related to where there is a light. 	**1.A** Develop a model to identify the important parts of the system and how those parts interact that could cause an object to look different in different light conditions. **1.B** Ask questions that arise from observations of a phenomenon in which an object appears different depending on the light conditions within the defined system.

LESSON 2

3 days

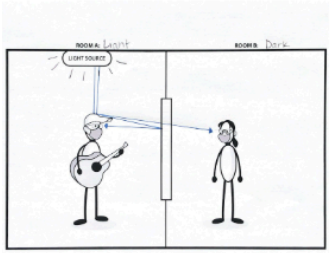
What happens if we change the light?

Investigation

The one-way mirror phenomenon happens when there is a difference in light between the two sides of the material.

In this lesson, we observe the one-way mirror in and out of the box model. We move the flashlight to Room B, make both rooms light, and make both rooms dark. We figure out these things:

- When we change the location of light in the box system, the phenomenon reverses.
- Reflection happens on the side that is lit, while the side that is dark is see-through.
- The one-way mirror phenomenon is strongest when there is a difference in light between the rooms.
- Light travels in straight lines.
- For us to see an object, light must leave a light source, bounce off the object, and travel in a direct path to enter our eyes.



2.A Ask questions that can be investigated in the classroom and frame a hypothesis about what we will see from both sides of the box model if we change the amount of light on either side (structure).

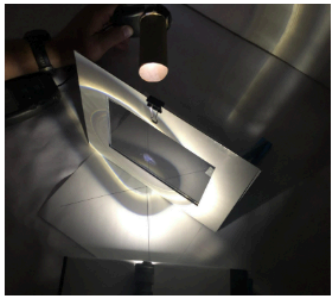
2.B Modify a model based on evidence to match changes in what we see when we change the light in the box model (structure).

LESSON 3

3 days

What happens when light shines on the one-way mirror?

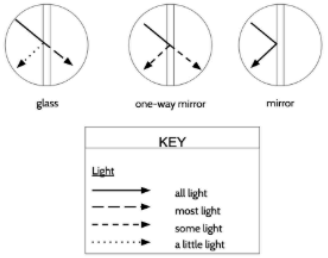
Investigation



Different materials reflect and transmit different amounts of light, as measured quantitatively by a light meter.

We know that the one-way mirror acts like a mirror in a brightly lit room and acts like a window in a dark room. To figure out why it behaves this way, we compare what happens when light shines on the one-way mirror, a pane of glass, and a regular mirror. We record initial observations and then use a light meter to measure the amount of light transmitted through and reflected off each of those materials. We use a tool to develop an experimental question and then plan the investigation. We document our observations and analyze data to figure out what happens when light shines on the one-way mirror. We figure out these things:

- Light travels in straight lines. (reinforcing 4th grade)
- When light shines on an object, it is reflected (bounces off), transmitted (passes through), or some combination of these, depending on the object's material.



3.A Ask a testable question to determine how an object's material (structure; independent variable) influences the amount of light transmitted and reflected (function; dependent variable).

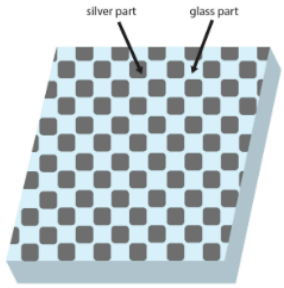
3.B Use evidence to modify a model to explain how an object's material (structure) influences the path of light as it transmits through or reflects off the material (function).

LESSON 4

1 day

How do similar amounts of light transmit through and reflect off the one-way mirror?

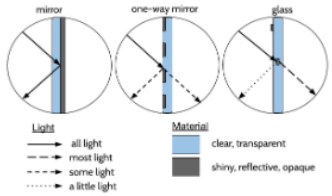
Investigation



A one-way mirror has a thin silver layer compared to a regular mirror that is fully silvered and glass that is not silvered.

We wonder how similar amounts of light transmit through and reflect off the one-way mirror. We think it has something to do with how the one-way mirror is made. We read more about regular mirrors and one-way mirrors and find out that regular mirrors have a thick layer of silver on the glass, and one-way mirrors have a thin layer of silver embedded in a plastic film on the glass. We modify a model to explain what happens when light shines on the different structures in each material. We figure out these things:

- A material can have different structures, even at a microscale, that cause different amounts of light to transmit through or reflect off of it.



4.A Develop a model to describe the unobservable mechanisms that affect how a material's microscale structures change how light reflects off and transmits through the material (function).

LESSON 5

1 day

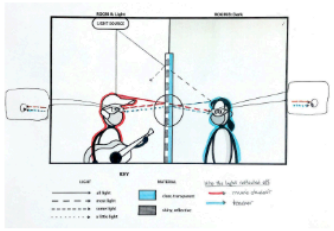
How do light and the one-way mirror interact to cause the one-way mirror phenomenon?

Putting Pieces Together, Problematizing

The one-way mirror acts as a mirror on the lit side and as a window on the dark side.

In this lesson, we revisit the anchoring phenomenon and model interactions between light, the people, and the one-way mirror to explain why the music student and the teacher all see the music student. We realize that a little light reflects off the teacher and enters the student's eyes, which makes us wonder why the student doesn't see the teacher. We figure out these things:

- When light reflects off the music student and travels to the one-way mirror, about half of the light reflects off the silver structures back to the student's eyes and the other half transmits through the transparent parts to the teacher's eyes.
- The light that transmits through the one-way mirror reflects off the teacher and travels to the one-way mirror. About half of that light reflects off the silver structures back to the teacher's eyes and the other



5.A Revise a model to explain the observable one-way mirror phenomenon caused by unobservable interactions between light, the people, and the one-way mirror, which reflects and transmits about the same amount of light.

LESSON 6

2 days

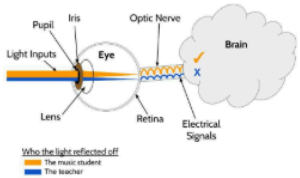
Why does the music student not see the teacher?

Investigation

What we see is determined by the interactions between the light that enters the eye, the structures that make up the eye, and the brain, which processes the signals it receives from the eye through the optic nerve.

In this lesson, we know that light has reflected off the teacher and enters the student's eyes. We wonder why the student can't see her. To figure this out, we obtain more information about what happens when light enters the eye. We model how light inputs transform into signals that the brain processes to tell us what we see. We think about experiences from our everyday lives to help us explain why we only see some inputs of light better than other inputs. We figure out:

- Light changes direction (refracts) when it travels between different transparent materials.
- When a light input is detected by sense receptors in our eye, it is turned into a signal that travels along the optic nerve to the brain, which processes it into what we see.
- When there are multiple inputs, the brain responds to the strongest signal.



6.A Ask questions to model the path of light as it travels through the lens of the eye, and to explain how the shape and composition of the lens causes the path of light to change directions (refract) before reaching the retina at the back of the eye.

6.B Develop a model that describes how the eye responds to (interacts with) different inputs of light and transforms those inputs to signals that travel along the optic nerve to the brain, which processes the signals into what we "see."

LESSON 7

1 day

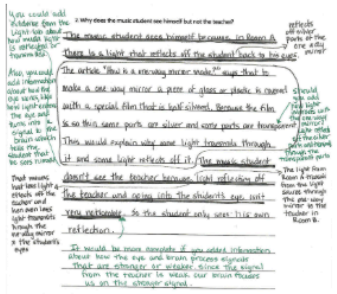
Why do the music student and the teacher see the music student but the music student can't see the teacher?

Putting Pieces Together

The music student can see his reflection in the mirror on the lit side but cannot see the teacher. The teacher on the dark side can see the music student through the glass.

We review the class models from Lessons 5 and 6, the class science ideas list, and our individual Progress Trackers. We develop a written explanation to answer the question: Why does the teacher see the music student? We individually draft an explanation to answer the question: Why does the music student see himself but not the teacher? We self-assess our explanations and give and receive peer feedback on them. We then revise a final explanation. We figure out:

- The music student sees himself because light reflects off the music student to the one-way mirror and reflects back to his eyes. This light input is the strongest signal that is processed by his brain.
- The teacher sees the music student because light reflects off the music student to the one-way mirror and transmits through the one-way mirror to her eyes. This light input is the strongest signal that is processed by her brain.
- The music student can't see the teacher and the teacher can't see her reflection because the light inputs from those objects are weaker and the brain doesn't respond to them.



7.A Construct and revise an explanation using a model to explain why an object appears different (effect) depending on the interaction between light and an object's material and how the brain processes signals (causes).

Assessment: Lesson 7 Written Assessment Final explanation

LESSON 8

3 days

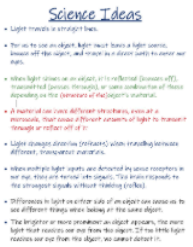
Why do we sometimes see different things when looking at the same object?

Investigation, Putting Pieces Together

Materials like glass can act like one-way mirrors when there is a differential in light on

We investigate the best light conditions for the one-way mirror phenomenon to occur and decide the effect is greatest when there is a large difference in light on both sides of the material. We use this idea to investigate related phenomena. We conclude that other materials, like glass, can act like one-way mirrors in situations in which there is a similar light differential on either side of the material. We use our model and science ideas to demonstrate what we have learned on an assessment. We revisit the DQB to document the questions we have answered in the unit and to reflect on our learning. We figure out these ideas:

- Differences in light on either side of an object or



8.A Use a model to describe how differences in light on both sides of a one-way mirror strengthens or weakens the one-way mirror phenomenon due to changing the components and interactions within and between systems.

8.B Apply science ideas and evidence from classroom investigations to explain a common, real-world phenomena in which a material designed for light transmission and to look transparent to the eye and brain functions as a one-way mirror due to the relationship the material has to other parts in the system.

Final Assessment: Lesson 8 Model Assessment Portraits Through Glass

Additional Resources:

- Driving Question Board
- Question Formulation Technique (QFT)
- KQL
- Talk Activities

September, 2025

- Summary Table
- Final Scientific Modeling
- Final Scientific Modeling
- CCC Discussion Cards
- 321 Strategy active viewing
- 60 Formative Assessment Ideas
- CER

Unit Overview	
Unit Title:	Thermal Energy (OpenSciEd Unit 6.2)
Author(s):	Lindsay Davenport
Grade Level/Course:	Grade 6/Science
Length/Dates:	12 weeks (approximate timeline is Mid-October- Mid-December)
Unit Summary: 2-4 sentences describing the main ideas, content and skills of the unit.	The unit begins with students comparing how well a store-bought insulated cup and a regular plastic cup keep drinks cold. Observing that the regular cup warms faster, they investigate differences in cup design, starting with the lid, and model evaporation. Discovering that temperature still changes in a closed system, students explore energy transfer from light absorption and warmer surrounding air. The unit culminates with students designing their own drink container that meets specific performance criteria.

Performance Expectations *(This unit builds toward these performance expectations)*

MS-PS1-4:
Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

MS-PS3-3:
Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.

MS-PS3-4:
Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass and the change in the average kinetic energy of the particles as measured by the temperature of the sample.

MS-PS3-5:
Construct, use, and present arguments to support the claim that when the motion energy of an object changes, energy is transferred to or from the object.

MS-PS4-2:
Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.

MS-ETS1-4:
Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

SEP Implications (Science and Engineering Practices)	DCI Implications (Disciplinary Core Ideas)	CCC Implications (Cross Cutting Concepts)
Developing and Using Models: This unit **intentionally develops** this practice by providing explicit instruction and scaffolds to support students in modeling particle scale mechanisms that result in observable heating and cooling phenomena. These include modeling templates, physical manipulatives (e.g., chips, marbles), and computer simulations. Students develop models for explaining how unobservable mechanisms result in observable phenomena which is a new context compared to the micro scale that was modeled in the *One-way Mirror Unit*. Because of particle-scale mechanisms, simulations are necessary to support students in modeling relationships among variables. Students also develop models to plan for the cup design challenge, and to explain how their cup designs work to minimize energy transfer. **Planning and Carrying Out Investigation.** This unit **intentionally develops** the practice. Students are given the opportunity to explore initial questions they have about cups through uncontrolled investigation, and then through a series of highly controlled investigations, to come to the conclusion that matter is not moving between systems, but rather energy is transferring between systems. Students articulate independent, dependent, and control variables; they co-construct collaborative investigation procedures to follow; reflect on ways to minimize error in their procedures; and fine tune procedures. In the design challenge, they define procedures to conduct fair tests under a range of conditions, and revisit those procedures to fine tune them before they conduct tests on their optimized designs. Students are assessed on this practice in a mid-point assessment.	**PS1.A. Structures and Properties of Matter** • **Gases and liquids are made of molecules or inert atoms that are moving about relative to each other.** • **In a liquid, the molecules are constantly in contact with others; in a gas, they are widely spaced except when they happen to collide. In a solid, atoms are closely spaced and may vibrate in position but do not change relative locations.** • **The changes of state that occur with variations in temperature ~~or pressure~~ can be described and predicted using these models of matter.** Students develop particle models to explain what happens to the water inside the cup to warm up, and how particles might escape the system. They model how particles evaporate or condense depending on the energy of the particles (which is revisited in the *Storms Unit*). In later lessons, students develop particle models to show how gases, liquids, and solids at high temperature move in comparison to low temperature. Students develop and modify particle models that include the spacing and movement of particles in three states of matter in the context of the cup system: (1) the air outside it, (2) the liquid inside it, and (3) the metal or plastic material of the cup itself. Conversations about modeling representations, such as particle spacing and movement, also occur throughout. **PS3.A. Definitions of Energy** • **The term "heat" as used in everyday language refers both to thermal energy (the motion of atoms or molecules within a substance) and the transfer of that thermal energy from one object to another. In science, heat is used only for this second meaning; it refers to the energy transferred due to the temperature difference between two objects.** • **Temperature is not a measure of energy; the relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present.** • **Temperature is a measure of the average kinetic energy of particles of matter. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present.** Students develop an understanding that kinetic energy is used to describe the motion of particles, which they define explicitly. They deepen their understanding of temperature as the average kinetic energy of particles and they compare temperature to total energy of the system. They also define thermal energy as a term describing the motion of particles or kinetic energy of particles within a substance. Heat is a term used frequently throughout the unit often conflating it with thermal energy in several lessons. This is intentional in order to work from	**Patterns:** This unit **intentionally develops** this crosscutting concept.. Students engage in all elements of this crosscutting concept across the unit. Students use patterns as a helpful lens during data analysis as students interpret temperature data from various investigations. Students use macroscopic patterns to figure out the nature of interactions at the microscopic scale and to identify case and effect relationships. **System and System Models:** This unit **intentionally develops** this crosscutting concept. While students began to work with models representing systems in the *One-Way Mirror Unit*, in this unit they learn to construct particle-level models that represent energy flow in a system. Students initially set up these cup models as a system model, and begin to identify important components and interactions that should be tested to explain why the water warms up. The cup system model targets, specifically, tracing matter and energy inputs and outputs from the system to explain why water inside the system warms up.

Analyzing and Interpreting Data: This unit **intentionally develops** this practice. Students work with data throughout the unit as they run investigations and use data as evidence for their claims about phenomena to design their own devices. Students calculate means from pooled data across the class. They consider limitations of data analysis when the teacher explains the accuracy of the digital scale (+/- 0.1 g). Students discuss how averaging multiple measurements from many trials can help counterbalance this source of error. They also use their data to modify their data collection methods to work toward more precise data collection.

Constructing Explanations and Designing Solutions: This unit **intentionally develops** this practice. Students use scientific ideas to construct and test an object that is designed to slow energy transfer. Students articulate precise criteria and constraints for the design challenge, and identify how to test the devices against those criteria and constraints. They undertake this design project with multiple design cycles in which students tweak design features to optimize their device's performance. Students explain how features of their device worked and why and which features did not work and why, connecting these back to the criteria and constraints agreed upon for the design challenge.

The following practices are also **key to the sensemaking** in the unit:

- Asking Questions and Defining Problems
- Engaging in Argument from Evidence

students' initial ideas. Heat is not explicitly defined until Lesson 14, after students have developed ideas about energy transfer between objects/substances.

PS3.B. Conservation of Energy and Energy Transfer

- **When the kinetic energy of an object changes, there is inevitably some other change in energy at the same time.**
- **The amount of energy transfer needed to change the temperature of a matter sample by a given amount depends on the nature of the matter, the size of the sample, and the environment.**
- **Energy is spontaneously transferred out of hotter regions or objects and into colder ones.**

In the second lesson set, students collect evidence to support the idea that energy transfers from warmer substances and objects to cooler ones (and not vice versa). The Water Bath Lab in Lesson 9 targets the idea that as energy decreases in one system, the energy increases in another system. This idea is further developed on the particle scale in Lesson 13. Students further investigate the amount of matter and nature of the matter in the sample in Lesson 13, too. This culminates in a final test of energy transfer in Lesson 14 followed by students developing an argument to support their conclusions.

PS4.B. When light shines on an object, it is reflected, absorbed, or transmitted through the object, depending on the object's material ~~and the frequency (color) of the light~~. In Lesson 8 students investigate and collect evidence that light can be absorbed by and transfer energy to an object. This DCI continues to be developed in the *Storms Unit*.

ETS1.A. The more precisely a design task's criteria and constraints can be defined, the more likely it is that the designed solution will be successful. Specification of constraints includes consideration of scientific principles and other relevant knowledge that is likely to limit possible solutions. Students make sense of a set of criteria and constraints provided to them in the Cold Cup Challenge. They can add to or refine this list. Some of the criteria and constraints are based on scientific principles, while others focus on consumer needs that may limit designs (such as environmental friendliness of materials and the diameter of the cup to fit in a typical cup holder).

ETS1.B. A solution needs to be tested and then modified on the basis of the test results in order to improve it. There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem. At the outset of the design challenge, students talk through the various tests they will conduct on their designs and whether the tests will provide the necessary information to decide if the design meets the criteria and constraints (Lesson 16). In Lesson 17, students reflect on the design process and the criteria and constraints before engaging in optimizing their designs.

Energy and Matter: This unit **intentionally develops** this crosscutting concept. In the first lesson set students focus on tracing matter through physical changes, drawing on the idea that matter is conserved. The remainder of the unit focuses on tracing energy, accounting for energy transferring within and between systems.

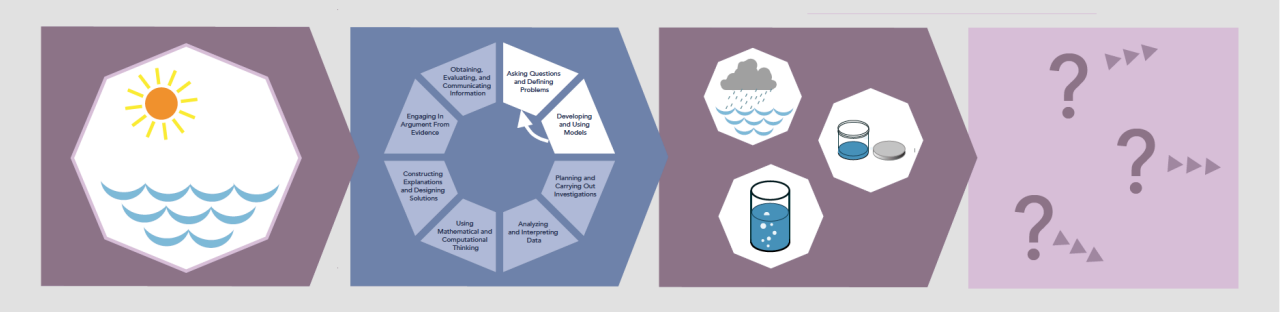
Structure and Function: This unit **intentionally develops** this crosscutting concept. Students began their work with structure and function in the *One-Way Mirror Unit.* In this unit, they build on ideas about how properties of materials affect function by considering interactions at the particle level to inform their designs. Structure and function becomes a focal crosscutting concept when students enter the design portion of the unit in lesson set 3. They are cued to think about design features, or structures, and how they function to minimize energy transfer.

The following crosscutting concepts are also **key to the sensemaking** in this unit.

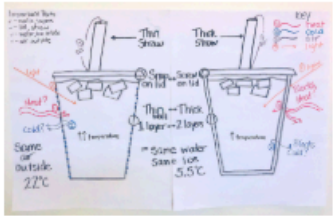
- Cause and Effect
- Scale, Proportion, & Quantity

Phenomenon

Explore Anchoring Phenomenon | Attempt to Make Sense | Identify Related Phenomena | Develop Questions & Next Steps



Unit Question: How can containers keep stuff from warming up or cooling down?

Driving Questions	Lesson Level Phenomena	Activity	Learning Targets
Learning Set 1 (Lessons 1-6):			
LESSON 1 3 days **Why does the temperature of the liquid in some cup systems change more than in others?** Anchoring Phenomenon	 *Makers of a fancy plastic cup claim it keeps a drink cold for longer than a regular plastic cup.*	We observe an iced drink in a regular cup warming up more quickly compared with an iced drink in a fancy cup. We develop systems models to explain what is happening in the two cups that one can better maintain the temperature of the drink. We brainstorm related phenomena and ask questions about design features that influence how well an object can keep something hot or cold. We figure out: • The cup system includes the different parts of the cup and the water and air inside the cup. All of these parts work together (interact) to form the system. • Some systems have structural features that help maintain the temperature of a substance inside the system, keeping the substance hot or cold longer compared with other systems. • Heat can enter the cup system and/or cold can leave the cup system, and maybe gases can escape the system too.		**1.A** Develop an initial model to describe a phenomenon in which a substance changes temperature and identify structural parts of the system that slow down or speed up the temperature change (function). **1.B** Ask questions that arise from careful observation and can be investigated in the classroom to test how parts of the cup systems contribute to warming up or maintaining the temperature of the substance inside.
			2.A Plan and carry out an investigation to gather evidence to answer scientific questions

LESSON 2

2 days

What cup features seem most important for keeping a drink cold?

Investigation

There are features of a cup that are important for keeping a drink cold.

We plan and carry out an investigation to figure out 2 things. First, what cup features are important for keeping a drink cold? Second, how would changing the cup features cause the drink to warm up faster? We collect, organize, and publicly analyze data from our investigation to identify patterns to determine which cup features help maintain a drink's temperature. We figure out:

- Some systems have structural features that are designed to help maintain the temperature of a substance inside the system.
- The cup features that seem to play a significant role in keeping a drink cold are a lid, double walls, and maybe the type of cup material.

about how parts of the cup system relate to the temperature change of the liquid inside.

2.B Analyze and interpret data to find patterns indicating which parts of the cup system (features) influence the temperature change of the substance inside the system.

LESSON 3

2 days

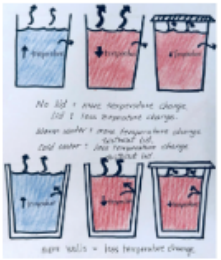
How are the cup features that keep things cold the same or different for keeping things hot?

Investigation

Students test whether cups that can keep liquids cold can also keep liquids hot.

We look at the order of cups based on their ability to keep liquids cold. We investigate whether these same features are able to keep liquids hot. Based on our findings, we revise our explanation from Lesson 1 to explain how particular cup features help to keep liquids hot and/or cold. We ask additional questions about the cup features now that we know more. We then design an experiment to investigate our questions and ideas about how the lid works. We figure out:

- Cups that can keep liquids cold are also able to keep liquids hot.
- Cups with lids are able to keep liquids hot and cold better than cups without lids.
- Cups with more walls or layers will be able to keep liquids hot and cold better than cups without lids.



3.A Develop and use a model to explain how the best-performing and worst-performing cup systems affect the temperature change of a substance inside a system.

3.B. Plan an investigation to investigate how the lid (a structural feature of the cup system) works to slow the temperature change (function) of a substance inside the system.

LESSON 4

3 days

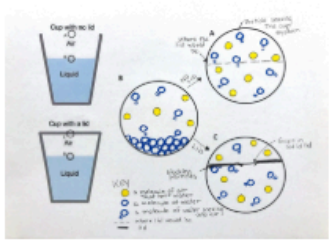
How does a lid affect what happens to the liquid in the cup?

Investigation

Hot liquid in a cup with a lid changes temperature less than in a cup without a lid. The amount of matter lost to the surroundings due to evaporation is less too. A completely closed system loses no matter to the surroundings, even though the liquid in it still changes temperature.

We plan and carry out investigations to determine the effect of a lid on temperature change and mass change of a hot liquid in a cup. We calculate the mean for two cup systems to compare the temperature drop and mass change in each condition. We develop and use a particulate model of liquids and gases to explain the mass loss in an open system. We figure out:

- The lid helps to maintain the temperature of a hot liquid inside the cup and it slows down matter loss from the system.
- Liquids and gases are made of particles. Particles in gas have a lot of space between them but those in liquids do not.
- The smallest particle of water is a molecule. Molecules of water in liquid go into gas over time (evaporation).
- An open system has space for matter to enter or exit. A closed system is one in which no matter can enter or exit.
- The hot liquid cools down even when we prevent most matter from leaving the cup system by using a lid.



4.A Plan and carry out investigations to determine the effect of a lid on temperature change and mass change in systems that are more open and less open.

4.B Analyze and interpret data by applying concepts of probability to calculate the mathematical mean to compare the temperature change and mass change across conditions (patterns) and use these measures to make claims about the effect of the lid.

4.C Develop a model to describe why mass is lost in some conditions but not others (open systems versus less-open systems), using a particle model of matter for liquids and gases.

LESSON 5

1 day

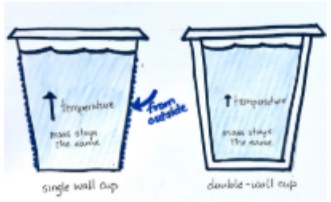
Where does the water on the outside of the cold cup system come from?

Investigation

Observe and measure closed cup systems containing cold liquids before and after water droplets form on the outside surface of the cup system.

We construct an investigation to support or refute the claim that the formation of water droplets (condensation) on the outside of a cup of cold water comes from water leaking through the cup walls. We measure the mass of a cup of cold water before and after condensation forms on the outside. We also observe condensation on the outside of a cup of cold water that has been dyed using food coloring. We use our observations and data to construct an argument to refute the claim that water droplets on the outside of the cup come from inside the cup system.

- The water droplets that form on the outside of a cup of cold water come from the air outside the cup, not from the inside of the cup.
- Water droplets often condense on a cold surface when humid air comes in contact with the surface.
- Liquids do not move through solids.
- Matter does not enter or leave a closed system; therefore, the mass of a closed system does not change.



5.A Collect and analyze different forms of data to identify patterns across our data sources that serve as evidence that condensation that forms on the outside surface of a cold cup system comes from the air outside the system.

5.B Construct an argument to support the claim that water forming on the outside surface of a cold cup system comes from the air outside the system and is not leaving the system through the walls.

LESSON 6

2 days

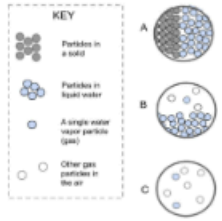
How can we explain the effect of a lid on what happens to the liquid in the cup over time?

Putting Pieces Together

A completely closed system loses no matter to the surroundings, even though the liquid in it changes temperature over time.

We use a model to show why water molecules cannot leave the cup at some points in the cup system but can at other points. We complete an individual assessment that includes making predictions about whether a cup with a new lid design will keep a drink cooler than a cup with an old lid design, developing a plan for collecting data to see if the amount of liquid changed in either cup over time and developing a model to explain why one cup system would lose more mass than another. We figure out these things:

- Liquids, gases, and solids are made of particles of matter.
- Particles in a gas have a lot of space between them, but particles in liquids and solids do not.
- Liquids and gases are made of particles that can move around freely, but solids are made of particles that cannot.



6.A Develop and use a particle model of matter for solids, liquids, and gases to show how structural differences in a cup system allow water molecules to leave the system at some points in the system but not at others.

6.B Plan an investigation and in the design, identify the controls, the tools needed to gather the data, and how much data are needed to support a claim about how much liquid (matter) leaves two different cup systems over 30 days.

Mid-Unit Assessment: Lesson 6 Explaining the Effect of Different Lid Designs

Learning Set 2 (Lessons 7-14):

LESSON 7

1 day

If matter cannot enter or exit a closed system, how does a liquid in the system change temperature?

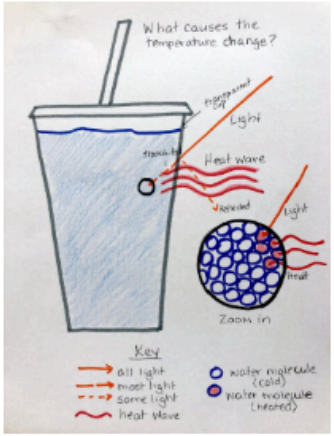
Problematizing

Other possible interactions could cause a temperature change in the liquid inside the closed cup system.

We consider what we know about the components (or structures) of the closed cup system, how they function, and how they interact with one another and with other objects and substances outside of the cup system to determine what else might a temperature change in the liquid inside. We develop models to represent our ideas about interactions between energy (light, heat, or cold) and the closed cup system. We use these models to explain the temperature change, and we determine ways to test our ideas to figure out how energy interacts with the closed cup system. We figure out:

- Since most of the matter does not enter or leave the cup system with a lid, light and heat or cold may interact with the system to cause a temperature change in the liquid inside.

*note: students will likely use "heat waves" as an initial representation for heat, and this is OK at this point in the unit. From lessons 8-14, students develop their understanding of heat, and the way they represent it in their models.



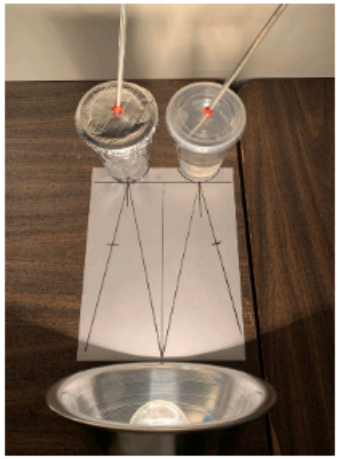
7.A Develop two models to show relationships among the parts of the mostly closed cup system and how light and heat or cold (i.e., mechanisms) cause the liquid inside to warm up or cool down (effect).

LESSON 8

2 days

How does a cup's surface affect how light warms up a liquid inside the cup?

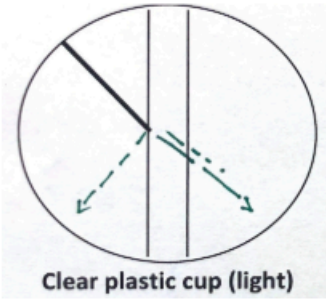
Investigation



Water warms up differently in cups with various surfaces when light shines on the cups, and it warms up in a completely dark condition too.

We carry out an investigation to test the interaction between light and the cup surface in warming up the cold water inside the cups. We shine light on cups with walls of different materials and colors and measure the amount of incoming, reflected, and transmitted light, and we also place some cups in a completely dark condition. We figure out that the water in all the cups warms up, even cups in the dark condition, but it warms up more in the cups in the light conditions. We wonder about additional mechanisms by which the water inside the cups warms up.. We figure out:

- Light can transfer energy into a system.
- When light that shines on a surface is not reflected or transmitted, it is absorbed, which warms the matter it shines on.
- Temperature changes in the water can still occur even if light does not transmit through the cup wall and even if there's no light.



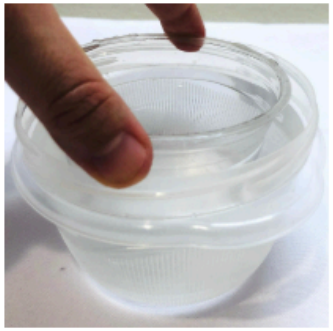
8.A Develop and use models to describe how light transmission through, reflection off, and absorption by cup walls causes changes in the temperature (effect) of water inside the cup.

LESSON 9

1 day

How does the temperature of a liquid on one side of a cup wall affect the temperature of a liquid on the other side of the wall?

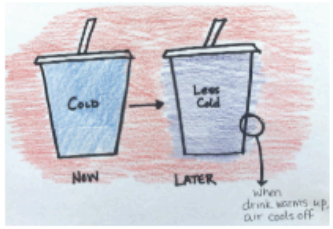
Investigation



The temperature increases and decreases inside a cup system are correlated with temperature decreases and increases outside the cup system.

We brainstorm how to test whether heat or cold is entering or leaving a cup system. We plan and carry out an investigation to place the cup in a water bath and measure the temperature inside and outside the cup to see if heat or cold is moving between the two systems. We figure out that when there is a temperature change inside the cup system, there is also a temperature change outside the system. We conclude that heat or cold moves through the cup wall and that the greater the temperature difference between the cup and water bath systems, the more energy is transferred between the two. We figure out:

- When the temperature of a sample of matter in one system decreases, the temperature of the matter in the neighboring system increases.
- When the temperature difference between two neighboring systems is great, more energy transfers between them.
- Heat or cold can move through the wall of the cup system.



9.A Carry out an investigation to measure temperature inside and outside a cup system to test whether heat or cold moves through the wall of the system.

LESSON 10

2 days

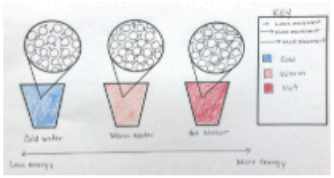
What is the difference between a hot and a cold liquid?

Investigation

Candy breaks into pieces and dissolves more quickly in hot water than cold water. Food coloring moves around and spreads out more in hot water than cold water. When water is shaken vigorously, the water warms up.

We investigate the differences between hot and cold liquids at the particle scale. A video showing candy dissolving in hot, warm, and cold water motivates us to investigate how water behaves differently at varying temperatures by adding food coloring to hot, room-temperature, and cold water. After collecting qualitative evidence that correlates movement in water to temperature, we read about a historical study supporting the idea that movement of water particles and temperature are closely connected. All three sources of information reinforce the ideas that (1) liquids are made of particles and (2) particles move more when a liquid is hotter and less when it is colder. We figure out that:

- The movement of particles is related to the temperature of the water, with particles in colder water moving less than particles in hotter water.



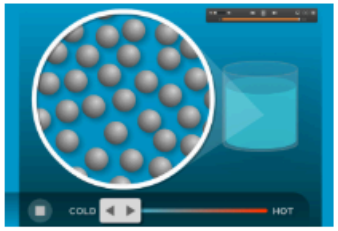
10.A Develop models based on evidence to explain that matter is made of particles that are in motion, and though the individual particles are not visible to the eye, their collective behavior can be observed as more or less movement depending on the matter's temperature.

LESSON 11

1 day

Why do particles move more in hot liquids?

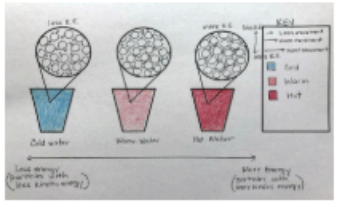
Investigation



A simulation shows that particles move slower when a liquid is cold and faster when a liquid is hot.

We wonder what happened in the *Food Coloring Lab* at the particle scale and how this relates to energy. We make observations from a simulation and obtain evidence that hot liquids have particles that move faster and cold liquids have particles that move slower. We call this energy of movement *kinetic energy*. We spray perfume on one side of the classroom and smell it on the other side, evidence that particles in gas move freely like particles in liquids. We use new ideas about kinetic energy to explain our previous lab observations. We revisit our original iced drink warming up in the regular plastic cup and wonder where the kinetic energy came from. We figure out:

- A particle's speed is related to how much kinetic energy it has.
- The particles in hot liquids and gases have more kinetic energy than the particles in cold liquids and gases.
- Liquids and gases are made of particles that can move around freely.



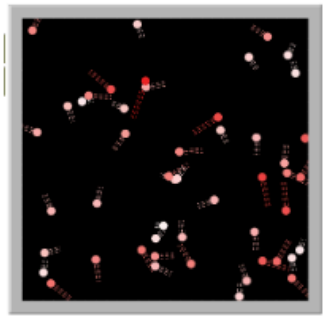
11.A Construct an explanation about why food coloring moves more in hot water than in cold water using the idea that at the particle scale, particles in liquids at warmer temperatures have more kinetic energy than particles in liquids at cooler temperatures.

LESSON 12

2 days

How does the motion of particles compare in a sample of matter at a given temperature?

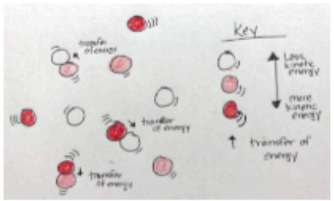
Investigation



When particles collide, they transfer their kinetic energy to each other, and in a sample of matter at the same temperature, the particles have different speeds.

We use a simulation to investigate how individual particles in a sample of gas do not have the same kinetic energy, and how the kinetic energy of each particle is constantly changing as they collide with one another. We argue that temperature is a measure of the average speed of the particles in a sample of matter, and that the total energy of that sample is the sum of the kinetic energy of all the particles in the sample combined. We figure out:

- Not all particles in a sample of matter have the same kinetic energy.
- Kinetic energy is transferred from one particle to another in a particle collision.
- Temperature is a measure of the average kinetic energy of the particles in a sample of matter.
- The total kinetic energy of a sample of matter is the sum of the kinetic energy of all the particles in that sample. If you add more particles, the total kinetic energy increases but the temperature (the average kinetic energy) might stay the same.



12.A Analyze and interpret data to mathematically represent the cause-and-effect relationships between the average kinetic energy of the particles of a gas, the temperature of the gas, and the total kinetic energy of all the particles in the gas.

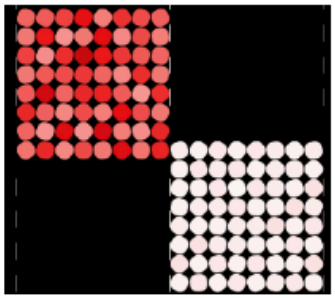
12.B Carry out an investigation to look for patterns in data generated by using an interactive simulation of the particles in a gas (which are too small to be observed) to observe the kinetic energy of individual particles and the transfer of energy when they collide.

LESSON 13

2 days

How could the motion of particles on one side of a solid wall affect the motion of the particles on the other side of that wall?

Investigation



When a fast-moving glass marble hits a slow-moving glass marble moving in the same direction, the fast-moving marble slows down and the slow-moving marble speeds up. When a moving glass marble hits a line of magnet marbles held in place, the glass marbles on the other side of the magnetic marbles start moving.

We use a simulation to analyze particle speeds before and after a collision. We use marbles to investigate the effects of collisions on particle speeds in different situations to simulate interactions between particles in a gas, a liquid, and a solid. We use a simulation to analyze particle interactions in different solids in contact with each other at different temperatures. We figure out these things:

- Particles in a solid vibrate back and forth in place.
- Collisions between particles in a solid, liquid, and/or gas can transfer kinetic energy (KE or motion energy) from one particle to another.
- The more particles in a sample of matter that are in contact with another sample of matter, the greater the amount of particle KE is transferred from the warmer piece of matter to the cooler pieces of matter over time.
- The more particles an object is made of, the more energy must leave or enter the system in order to change the temperature of that object.

13.A Carry out investigations using a particle model of matter (with marble manipulatives and computer simulations) to generate evidence that one way the temperature of matter changes over time is that kinetic energy is transferred in collisions between the particles (matter) within and between solids, liquids, and gases.

LESSON 14

3 days

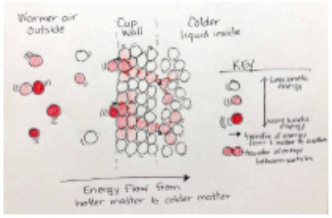
Does our evidence support that cold is leaving the system or that heat is entering the system?

Investigation, Putting Pieces Together

Butter melts when a candle is lit on one side of a strip of aluminum foil.

We sort evidence collected during previous lessons to support or refute claims that temperature changes are due to heat or cold moving into or out of the cup system. We conduct an investigation to collect additional evidence, helping us figure out that heat moves into the cup system, causing a temperature change. We revise our cup system models and apply our new understanding to answer questions from the DQB and explain related phenomena.We figure out:

- Temperatures change when energy moves from warmer to cooler matter.
- Energy is transferred when higher-energy particles come into contact with lower-energy particles.



14.A Develop and use models to track how energy spontaneously transfers out of hotter regions and into colder ones and causes changes in the water's temperature within the cup system.

14.B Construct written arguments supported by empirical evidence and scientific reasoning to support claims describing how energy spontaneously transfers out of hotter regions or objects and into colder ones.

Learning Set 3 (Lessons 15-18):

LESSON 15

3 days

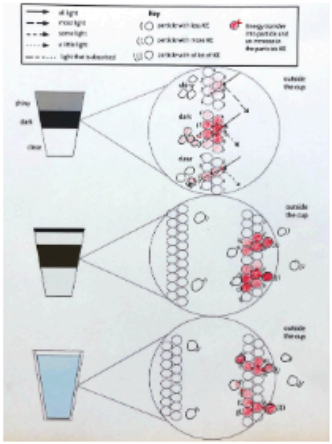
How do certain design features slow down the transfer of energy into a cup?

Investigation

Certain design features, such as double walls, foam, and reflective materials, slow down or minimize the temperature increase of a liquid inside a cup system.

We learn about the *Cold Cup Challenge* and look at examples of effective cup designs. We still need to explain how certain features work (i.e., double walls, porous materials, color). We jigsaw the gaps in our knowledge and conduct a gallery walk to share our findings. We reach consensus about mechanisms for energy transfer, which will help us in the design challenge. We figure out:

- Shiny/ light-colored materials (feature) prevent light from being absorbed. Absorption of light by particles (mechanism) transfers energy to the cup.
- Porous materials with air pockets (feature) slow down the conduction of energy because there are fewer particles to collide across the air pockets. Conduction of energy from particle collisions (mechanism) transfers energy.
- A double-walled cup with a vacuum or air between the walls (feature) slows down the conduction of energy because there are fewer or no particles to collide between the walls. This is a similar mechanism as in porous materials.



15.A Obtain and use information from scientific texts to evaluate the function of certain design features in minimizing energy transfer into a system.

15.B Develop a consensus model for explaining two mechanisms for energy transfer into a system, and design features that minimize energy transfer into a system.

LESSON 16

2 days

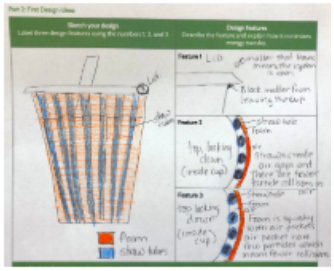
How can we design a cup system to slow energy transfer into the liquid inside it?

Investigation

Certain design features slow energy transfer reflecting light or using air pockets or layers.

We review the Cold Cup Challenge and design our cups, pointing out features we have evidence will slow energy transfer. We build our first cup designs, test them, and evaluate our results compared to the criteria and constraints. We provide feedback to each other to improve our cup designs. We figure out:

- The more clearly a design task is defined, the more likely the solution (cup system) will meet the criteria and constraints.
- A designed cup needs to be tested and then modified on the basis of the test results that will help evaluate the solution to how well it meets the criteria and constraints of a problem.



16. A Design a solution for a cup system with features (structures) to slow energy transfer into the liquid inside the cup (function).

16.B Carry out investigations to collect data to evaluate the performance of cup systems that slow energy transfer given the criteria and constraints of the problem, and to modify design features (structures) based on test results (functions).

LESSON 17

2 days

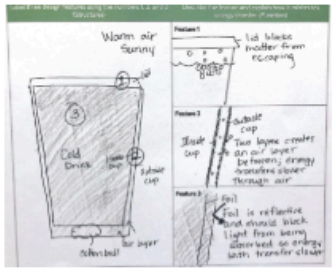
How can we improve our first design to slow energy transfer into the cup system even more?

Investigation

Cup designs that use fewer materials and reduce absorption of light and contact between materials are more effective.

We review our test results and feedback from our first design. We clarify the criteria and constraints and then redesign, build, test, and evaluate a new cup. We make observations from the new data to identify the features of the best performing cups. We figure out:

- Surface materials that reflect more light help cups perform better on the bright light and temperature test.
- Materials used on the cup walls that reduce the amount of contact between layers help cups perform better on the regular light and temperature test.
- The use of fewer materials can still be effective on the two temperature tests, while also reducing costs, diameter, and environmental impact.



17.A Design a solution that is modified based on test results to improve the features (structures) to better slow energy transfer (effect) by reducing the absorption of light or opportunity for particle collisions (function/cause).

17.B Carry out investigations to collect data to evaluate the performance of cup systems that slow energy transfer given the criteria and constraints of the problem, and to propose ways to optimize design features (structures) based on the test results (functions).

LESSON 18

3 days

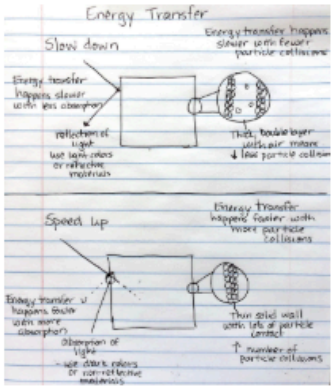
How can containers keep stuff from warming up or cooling down?

Putting Pieces Together

Objects designed to keep things cold or hot share similar design features, like materials that create air insulation and have transparent or reflective surfaces.

We review and interpret test results across our best cup designs. We use evidence to offer suggestions as our class works together to design the Ultimate Cold Cup. We generalize our model to explain patterns to minimize or maximize energy transfer, and use our model to predict how energy transfer could be maximized or minimized in everyday examples. Finally, we revisit the Driving Question Board and discuss all of the questions we can now answer. We figure out:

- The rate of energy transfer between systems speeds up or slows down depending on the number of particle collisions.
- The rate of energy transfer between matter and light speeds up or slows down depending on how much light is absorbed.
- The amount of matter in a substance affects the rate of energy transfer and how much energy is needed to increase the substance's temperature.



18.A Develop a model based on patterns in performance that can be used to predict ways to minimize or maximize energy transfer into or out of a variety of systems.

18.B Evaluate a design solution for a disaster blanket that includes several design features (structure) to minimize energy transfer (function) that could result in body heat loss.

Final Assessment: Lesson 18 Disaster Blanket Design

Additional Resources:

- Driving Question Board
- Question Formulation Technique (QFT)
- KQL
- Talk Activities
- Summary Table
- Final Scientific Modeling
- Final Scientific Modeling
- CCC Discussion Cards
- 321 Strategy active viewing
- 60 Formative Assessment Ideas
- CER

Unit Overview	
Unit Title:	Weather, Climate, & Water Cycling (OpenSciEd Unit 6.3)
Author(s):	Lindsay Davenport
Grade Level/Course:	Grade 6/Science
Length/Dates:	12-14 weeks (approximate timeline is January- Mid-April)
Unit Summary: 2-4 sentences describing the main ideas, content and skills of the unit.	The unit begins with students examining videos of hailstorms occurring in different places and seasons, showing large ice chunks falling on warm days. These observations spark questions about how hail forms, how clouds develop, why some storms produce heavy precipitation, and how water enters the atmosphere. In the second half, students analyze weather reports of a winter storm in the Midwest forecasted to bring snow and ice to the Northeast the next day. This prompts investigations into the causes of large-scale storms and how they travel across regions.

Performance Expectations *(This unit builds toward these performance expectations)*

MS-PS1-4:
Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

MS-ESS2-4:
Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

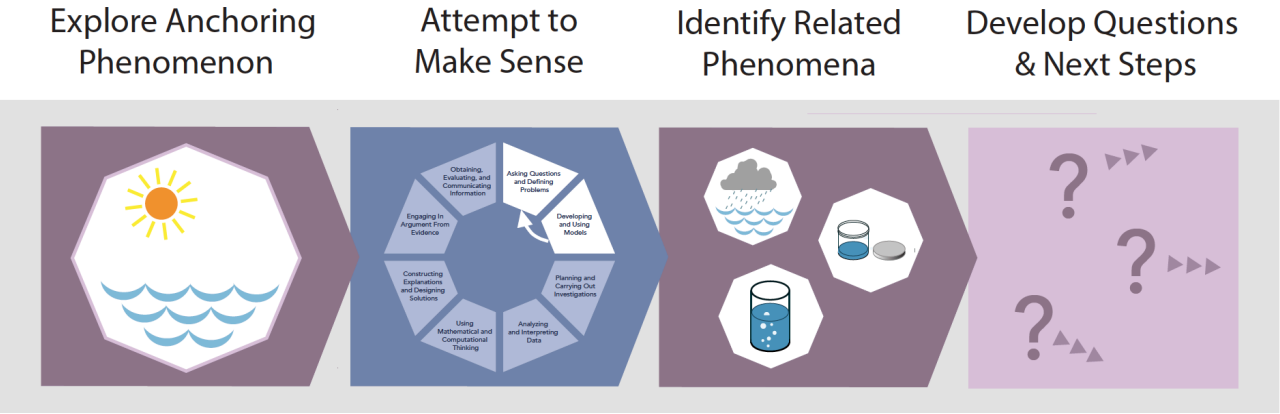
MS-ESS2-5:
Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.

MS-ESS2-6:
Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.

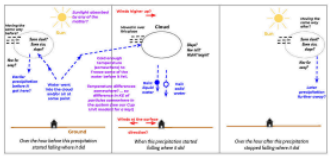
SEP Implications (Science and Engineering Practices)	DCI Implications (Disciplinary Core Ideas)	CCC Implications (Cross Cutting Concepts)
Developing and Using Models: This unit **intentionally develops** this practice. Students focus on a new element of modeling in identifying the limitations of a model in Lessons 10 and 14. They also develop and use models to explain phenomena that build on but are much more complex than, their prior work in the *Cup Design Unit*. In this unit, students develop models to explain multiple energy transfer processes (radiation, conduction, convection) and multiple matter transformation processes (evaporation, condensation, and crystallization). Furthermore, these processes occur across different spatial scales and students have to connect them together to make sense of many weather- and climate-related phenomena. The models used in this unit include particle-level models, models of air parcels in the air above us (over a few miles), models of air masses over hundreds of miles, and models of prevailing systems over hemispheres. **Planning and Carrying Out Investigations:** This unit **intentionally develops** this practice. In the first half of the unit, students conduct investigations in five different lessons that help them develop a model of cause and effect relationships involved in the energy transfer processes (radiation, conduction, convection) and matter transformation processes (evaporation, condensation, and crystallization) that cause weather phenomena. Students also engage in a new element of this practice as they evaluate and revise various aspects of their investigation designs, including data collection protocols in Lesson 4, a simulation interface in Lesson 10 and the experimental design for Lesson 12. **Analyzing and Interpreting Data:** This unit **intentionally develops** this practice. It is the focus of the lesson-level performance expectations in nearly half of the lessons of the unit. This unit will be students' first exposure to working with large data sets and they will work with new types of data representations that they did not work with in the *One-way Mirror Unit* and the *Unknown material with identifier: te.n*, including maps at multiple temporal and spatial scale scales and with multiple types of	**PS1.A. Structures and Properties of Matter** ● **In a liquid, the molecules are constantly in contact with others; in a gas, they are widely spaced except when they happen to collide. In a solid, atoms are closely spaced and may vibrate in position but do not change relative locations.** ● **The changes of state that occur with variations in temperature or pressure can be described and predicted using these models of matter.** Students extend their models for particle spacing in gas and liquid, which they developed in the *Cup Design Unit*, to now show how the spacing of the particles in any fluid (gas or liquid) changes with temperature, which subsequently affects the density of that part of the fluid and helps explain why it convects. They use this model to explain (1) what is causing the vertical growth of some clouds, (2) what causes faster/stronger updrafts in some clouds compared to others and what holds droplets and ice crystals aloft, and (3) how this can help explain why some storms produce really big hail and others don't. Additionally, students extend their models for how particle motion is related to the state of matter to develop the idea that water molecules are attracted to each other and that when water molecules are moving fast enough, they can break away from and bounce off each other, but when they are moving slow enough, they clump and stick together. This helps students develop a mechanism to explain why an increase or decrease in the temperature of a substance would cause it to change in its state of matter. **PS3.A. The temperature of a system is proportional to the average internal kinetic energy and potential energy per molecule (whichever is the appropriate building block for the system's material). When the kinetic energy of an object changes, there is inevitably some other change in energy at the same time.** The idea that temperature is a measure of the average kinetic energy of the particles in a sample of matter was developed in the *Cup Design Unit* and is reused in Lesson 3. It is then combined with another idea also developed in that prior unit, that energy transfer can occur through conduction. These sets of ideas are reused throughout this unit. **PS4.B. When light shines on an object, it is reflected, absorbed, or transmitted through the object, depending on the object's material ~~and the frequency (color) of the light.~~** The idea that light can be absorbed and converted to thermal energy is an idea that was developed in the *Cup Design Unit* and is reused throughout this unit. Color based dependencies are not discussed in this unit. **ESS2.C. The Role of Water in Earth's Processes** ● **Water continually cycles among land, ocean, and atmosphere via ~~transpiration,~~ evaporation, condensation and crystallization, and precipitation, ~~as well as downhill flows on land.~~** ● **Global movements of water and its changes in form are propelled by sunlight and gravity.** ● **The complex patterns of the changes and the movement of water in the atmosphere, determined by winds, landforms, and ocean temperatures and currents, are major determinants of local weather patterns.** ● **Variations in density due to variations in temperature ~~and salinity~~ drive a global pattern**	**Cause and Effect:** This unit **intentionally develops** this crosscutting concept. Students figure out cause-and-effect relationships throughout this unit, and they apply cause and effect to predict and explain phenomena with increasing independence and to increasingly more complex phenomena as the unit goes on. Students connect together relationships that have more than one cause and also connect together longer causal chain processes that occur in more steps than they encountered in prior units. **Systems and Systems Models:** This unit **intentionally develops** this crosscutting concept. Students define system boundaries in a system where such boundaries do not have visible physical structures, something they have not done before. In addition, they represent the interactions, inputs and outputs for both matter and energy within and across these systems for multiple processes (radiation, conduction evaporation, condensation, crystallization, convection, and uplift) **Energy and Matter:** This unit **intentionally develops** this crosscutting concept. Students focus on a new element of this practice, figuring out the transfer of energy can drive the motion of matter in a system, as they develop a model for temperature differences in matter causing convection currents that move air.

data overlays. The structure of these data grows in complexity from Lesson 2 onward. For example, in Lesson 2, students analyze hail accumulation maps from multiple cities and in Lesson 6 they analyze two parallel sets of global maps (net radiation and land surface temperature) from two different times of year. In Lesson 14, analyze a time series set of national weather maps with multiple layers of overlaid data, including precipitation amounts and types, cloud cover, low-pressure air mass centers, and fronts. Students also work with more complex numerical data analysis than in prior units. **Constructing Explanations and Designing Solutions:** This unit **intentionally develops** this practice. Students use a new element of this practice, constructing explanations that include qualitative and quantitative relationships between variables to predict and describe phenomena. This unit also focuses on applying scientific ideas and principles to explain a very wide array of phenomena, including the formation of hail, the growth of clouds, some of the causes of precipitation and surface winds, the formation and strengthening of hurricanes, why fronts form and move the way they do, and why rainforests are sometimes located in some parts of the world but not in other areas nearby. This is a shift in complexity and both temporal and spatial scale of phenomena students tackle to explain than in prior units. The following practices are also **key to the sensemaking** in the unit: ● Asking Questions and Identifying Problems ● Using Mathematics and Computational Thinking ● Obtaining, Evaluating, and Communicating information	**of interconnected ocean currents.** In the unit, students determine where all the water in the air comes from by measuring the humidity in the air over samples of different Earth surfaces to help them figure out that individual water can evaporate from many different types of surfaces with water in or on them when they gain enough motion energy (kinetic energy). Students figure out that molecules of water vapor will start to condense or crystallize on cloud condensation nuclei (small, solid particles) when the air at 100% relative humidity is cooled and they develop a model to explain why don't water droplets or ice crystals fall from the clouds (precipitation) all the time. Students also develop ideas that rising air pushes up water droplets and crystals until they grow heavy enough to fall. The rising air in many cases can be traced back to density differences in that air that were the result of prior energy transfer from sunlight to the surface and from the surface to some of the air (via conduction). This idea is reused to explain large-scale air masses and storm systems in the unit. Students figure out that there are patterns in the direction that air and precipitation move over a region, which are caused by prevailing winds and the prevailing winds and these can help us predict where that air has come from. By the end of the unit, students figured out that the ocean is warmer near the equator and cooler near the poles, ocean currents can bring warmer waters toward the poles and cooler waters toward the equator, and since more evaporation occurs over warmer ocean waters, the temperature of the ocean affects the humidity of the air moving over it. They figure out how changes in elevation affect the flow of air over the land and that air that is forced upward due to elevation increases in the land cools as it rises which causes it to lose water vapor in it through condensation and precipitation. **ESS2.D. Weather and Climate** ● **Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ~~ice,~~ landforms, ~~and living things~~. These interactions vary with latitude, altitude, and local and regional geography, all of which can affect oceanic and atmospheric flow patterns.** ● **Because these patterns are so complex, weather can only be predicted ~~probabilistically~~.** ● **The ocean exerts a major influence on weather and climate by absorbing energy from the sun, releasing it over time, and globally redistributing it through ocean currents.** Students develop ideas across lessons 2-18 are used to explain weather-related phenomena and additional ideas developed in lessons 19-22 are used to explain climate-related patterns. In lesson 14-18, students develop the idea that what was happening in the air in or around one part of the country at one point in time can be used to make predictions about what is likely going to happen in another part of the country at a later point in time. Students do not develop ideas about the probabilistic nature or certainty of such predictions in this unit, as many probability-based ideas aren't targeted in the common core math standards until 7th grade. In lesson 4, students figure out that sunlight warms the earth's surface, and that this also includes the oceans in lesson 20. They also figure out that the ocean is warmer near the equator and cooler near the poles, and that ocean currents can bring warmer waters toward the poles and cooler waters toward the equator, and since more evaporation occurs over warmer ocean waters.	They also develop the idea that state changes are also caused by the transfer of energy, which in turn also drives the cycling of matter in and out of the atmosphere. **Stability and Change:** This unit **intentionally develops** this crosscutting concept. Students figure out a new element of this crosscutting concept, figuring out how to explain stability and change in systems by tracking particle interactions over time and at different scales. Students extend their particle level model developed in prior units to explain how a parcel of fluid such as air will rise, fall, or remain in a stable position based on particle interactions. They also extend this particle level model to explain why the state of water is relatively stable above or below a certain temperature, but a state change occurs when that temperature threshold is crossed. The following crosscutting concept is also **key to the sensemaking** in the unit: ● Pattern

Phenomenon



Unit Question: Why does a lot of hail, rain, or snow fall at some times and not others?

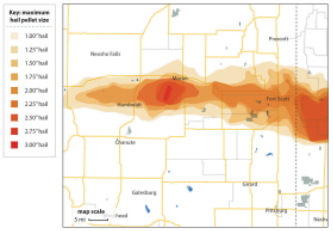
Driving Questions	Lesson Level Phenomena	Activity	Learning Targets
Learning Set 1 (Lessons 1-6):			
LESSON 1 3 days **What causes this kind of precipitation event to occur?** Anchoring Phenomenon	 *Large, frozen pieces of water fall from the sky during storms at different locations on what appear to be relatively warm days.*	We observe three video clips of hail falling in different areas of the United States on different days. We develop a model to try to explain what causes this to occur. We develop questions for our Driving Question Board (DQB) about the mechanisms that cause different kinds of precipitation events. We brainstorm investigations we could do and sources of data that could help us figure out answers to our questions. We figure out these things: • Rain and wind accompany some hail events. • Some of the water that reaches the ground reached a low enough temperature to freeze, at some point, before it fell. • Clouds can be seen moving into and out of the area where it hailed. • Cloud movement in the sky, moving air (wind) at Earth's surface, and temperature may be related to why, where, and when different forms of precipitation fall.		**1.A** Develop an initial model to describe changes and mechanisms at both the observable and the particle level that cause hail to fall during a brief time period. **1.B** Ask questions that arise from careful observation of phenomena and gaps in our current models to clarify and seek additional information about how changes to the flow of matter and energy in the air above and around a location on Earth's surface could cause short-duration precipitation events and longer-duration precipitation events (scale).

LESSON 2

1.5 days

What are the conditions like on days when it hails?

Investigation



Images of hailstones show that they come in different shapes and sizes. Maps and weather condition data show that hailstorms occur in many places and on relatively warm days.

We examine photos of hailstones and analyze and interpret data from cases of hail events at different locations and times of year to notice patterns and identify relevant factors that might explain the formation of hail. We figure out these things:

- Hailstones are made of ice, often in layers.
- Hailstorms are more common in the central United States, with fewer events in the west.
- The days that have hail also have relatively warm air temperatures (mostly in the 50–90°F range, which is above the melting/freezing point of water) and relative humidity in the range of 37–96 percent.
- Hailstorms happens later in the day in the spring, summer, and fall. They impact a small area (20-60 square miles).

2.A Analyze and interpret data using graphical displays (e.g., maps, charts, graphs, tables) of large data sets to identify temporal and spatial patterns in the range of weather conditions that lead to the formation of precipitation (hail).

LESSON 3

1.5 days

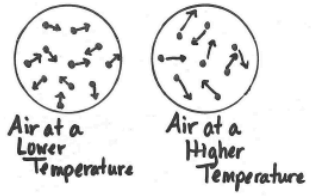
How does the air higher up compare to the air near the ground?

Investigation

Weather balloon data from four sites at four different times during the year show that the temperature of the air closer to the ground is warmer than the temperature of the air higher up in the atmosphere.

We analyze and interpret temperature profiles of the atmosphere collected from weather balloons at various altitudes at different locations during different times of the year. We develop a consensus model for representing the motion of the molecules that make up air at different temperatures. We figure out these things:

- Regardless of the season, the temperature of the air always decreases as you move away from Earth's surface and higher into the atmosphere.
- The air temperature at very high altitudes (approx. 40,000 ft) is coldest in winter.
- When the temperature of the air increases, the speed of the molecules that make up air increases, and when the temperature of the air decreases, the speed of the molecules that make up air decreases.



3.A Analyze and interpret sets of data to identify patterns (similarities across data sets) that provide evidence that air temperature changes based on altitude above Earth's surface independently of geographical location or time of year.

3.B Develop a model to show the relationship between the motion of the molecules that make up air and the energy of those molecules to explain the patterns of change in air temperature at variou

LESSON 4

2.5 days

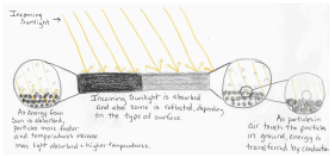
Why is the air near the ground warmer than the air higher up?

Investigation

Surfaces on Earth absorb and reflect light differently.

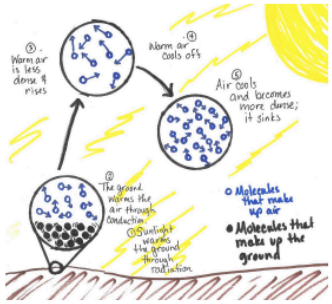
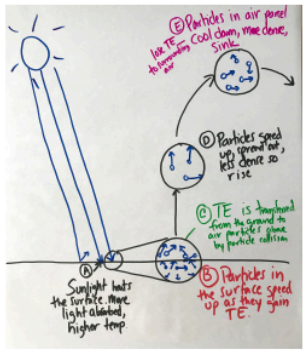
We plan and carry out an investigation to figure out what causes the air above different ground surfaces to be warmer than the air higher in the atmosphere. We measure the temperature of the air at different ground surfaces, the air temperature above those surfaces, and the amount of sunlight reaching and reflecting off those surfaces. We figure out these things:

- Energy from the Sun is absorbed by the ground, which then increases the kinetic energy (and therefore temperature) of the particles in the ground.
- Different surfaces heat up differently depending on how much energy from the Sun is absorbed.
- As particles in the air come into contact with the ground, energy is transferred to those particles through conduction.
- On a sunny day, air temperatures above the ground are cooler than the ground itself.



4.A Plan an investigation collaboratively by identifying variables of interest, tools to gather data, methods for obtaining measurements, and how many sites are necessary to determine if a pattern exists between the temperature of the ground and the temperature of the air right above it.

4.B Collect, analyze, and interpret data using graphical displays (tables of data we obtain from our own investigations) to identify ground and surface air temperature patterns as they relate to incoming and reflected solar radiation.

	4.C Develop and use a model to describe phenomena and unobservable mechanisms that track the transfer of energy from the Sun to the ground and then to the air at the surface.
LESSON 5 2.5 days **What happens to the air near the ground when it is warmed up?** Investigation   *Warming and cooling air in a bottle with a soap bubble film over the opening causes the bubble to inflate and deflate. Warming a helium-filled Mylar balloon causes it to increase in volume and rise upward; it decreases in volume and sinks as it cools.* We conduct an investigation to figure out how transferring thermal energy into and out of a parcel of air in a closed system (a bottle of air with a soap bubble film over the top) affects that air's volume and behavior. We conduct a second investigation to observe how density changes in a parcel of air (in a balloon) cause it to float or sink in the surrounding air. For each investigation, we develop a model to represent how the speed, spacing, and density of the molecules that make up air are affected by temperature changes. We figure out these things: • Changing the temperature of a parcel of air causes changes in the air's density due to changes in the kinetic energy (speed) and spacing of the molecules that make up the air. • Parcels of air that are less dense than the surrounding air rise. Parcels of air that are more dense than the surrounding air sink. • As they rise, parcels of warm, less dense air eventually cool off, transferring thermal energy to the surrounding air.  	**5.A** Conduct investigations to collect and use observations and data as evidence to determine the effects of thermal energy transfer to the air in contact with Earth's surface. **5.B** Develop and use a model to track and describe how transferring thermal energy to and from a fixed amount of air (matter) in a closed system affects its volume and density due to unobservable mechanisms (causes), including changes in the speed and spacing of the molecules that make up that air.
LESSON 6 2 days **How can we explain the movement of air in a hail cloud?** Putting Pieces Together   *A time-lapse video shows vertical cloud growth on a sunny day in the type of cloud that tends to form hail.* We examine photos and a video of clouds that produce hail to look for patterns in the motion of air. We construct an explanation using evidence for the path of air movement below, within, and at the top of a cloud that tends to form hail. We figure out: • Air near the surface of the ground is warmed from thermal energy transfer from the ground through conduction. • The warm air near the ground becomes less dense than the surrounding air and rises. • Eventually, the warm air transfers its energy to the surrounding air, becoming just as cold and dense as the air around it, and it stops rising. • If that air becomes even cooler than the surrounding air, it sinks. • This type of air movement happens more on sunny days because the air right above the ground gets warmed up more by light from the Sun on those days. • Air is a mixture of different types of substances) in the gas state including water vapor which is measured as humidity.  	**6.A** Analyze and interpret data including graphical displays of large data sets to identify cause-and-effect relationships to construct an explanation of how the movement of parcels of air via conduction and convection causes the upward and downward movement of air in clouds. **6.B** Develop and use a model to describe how thermal energy from the Sun causes movement of parcels of air via conduction to cause the formation of clouds. **6.C** Obtain information by reading scientific texts adapted for classroom use and summarize key ideas to determine that the air is a mixture of different types of gases (matter), including water vapor, and that relative humidity is a measure of a small proportion of molecules of water vapor in the air.

Mid-Unit Assessment: [Lesson 6 Explaining the Movement of Air in a Hailstorm Cloud]

Learning Set 2 (Lessons 7-13):

LESSON 7

2 days

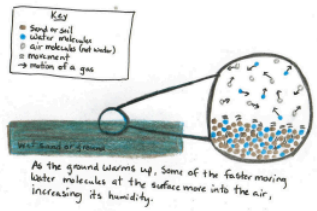
Where did all that water in the air come from, and how did it get into the air?

Investigation

Models of different Earth environments show an increase in relative humidity when thermal energy (heat) is added to the system.

We plan and carry out an investigation to determine where the water in the air comes from by measuring the humidity in the air over samples of different Earth surfaces. We figure out these things:

- Water can go into the air (increasing its humidity) from many different types of surfaces with water in or on them.
- When individual water molecules on the surface of a liquid gain enough motion energy (kinetic energy), they leave the liquid to become a gas; this process is called evaporation.



7.A Plan and conduct an investigation using a model to gather data to serve as evidence to support a claim about where water in the air originates (inputs).

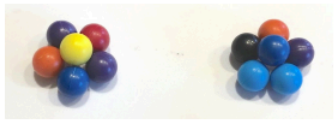
7.B Develop and use a model to predict and describe changes in particle motion and the movement of water molecules from a liquid into the air (via evaporation) when the thermal energy of the water increases (cause).

LESSON 8

2 days

What happens to water vapor in the air if we cool the air down, and why?

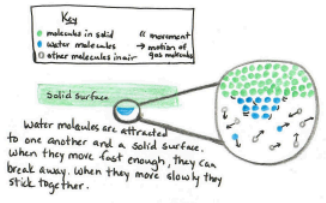
Investigation



Water droplets appear and grow on cool surfaces when humid air comes in contact with them. When two water droplets touch, they move toward each other to become one. The motion and interactions between magnetic marbles in a collision change depending on how fast they are moving.

We carry out investigations to explore what happens when air containing water vapor is cooled and what happens when water droplets make contact with each other. We use magnetic marbles to develop a model for how mutual attraction between water molecules and changes in their speed cause water to change from gas to liquid when it cools below a certain temperature.

- Water molecules are attracted to each other. When they are moving fast enough, they can break away from each other and bounce off each other. When they are moving slow enough, they clump and stick together.
- Water droplets can grow over time as they run into other water droplets or as more molecules of water vapor condense and stick to them.
- When water is below a certain temperature (its condensation/boiling point), the molecules are moving slow enough to remain in liquid form; when water is above that temperature, the molecules are moving fast enough to remain in gas form; they change state when cooled below or heated above that temperature.



8.A Carry out an investigation to collect data about the patterns in the appearance and growth of water droplets in humid air that is cooled down and how water droplets interact to serve as evidence to explain the causes of condensation (effect).

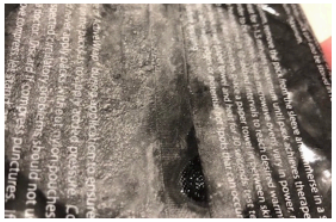
8.B Develop and use a model to describe unobservable mechanisms that explain why the mutual attraction between water molecules and a decrease in their speed causes them to condense (effect) when water reaches a low enough temperature (condensation/boiling point).

LESSON 9

1 day

Why don't we see clouds everywhere in the air, and what is a cloud made of?

Investigation



Informational text describes what clouds are made of, why we can see them, the role of cloud condensation nuclei, and methods of cloud seeding. Ice crystals appear and then grow larger on the surface of a cold gel pack over a container with humid air in it.

We read about what clouds are made of, why we can see them, the role of cloud condensation nuclei, and methods of cloud seeding. We argue that what happens in clouds is similar to what we see happen on the surface of a cold gel pack over humid air in our 2-L bottles. We figure out these things:

- Clouds are made of water droplets and/or ice crystals and molecules of gas (including water vapor).
- We see clouds because the water droplets or crystals in them reflect and scatter or absorb a noticeable amount of light.
- For molecules of water vapor in the air to start the condensation or deposition process, the air has to reach 100% humidity and then be cooled. The water vapor also needs a solid surface to stick to. In the air, these surfaces are cloud condensation nuclei (small, solid particles).

9.A Obtain and communicate information by reading scientific texts adapted for classroom use to determine key ideas and cause-and-effect relationships related to what clouds are made of, why we can see them, the role of cloud condensation nuclei, and methods of cloud seeding.

9.B Apply scientific ideas and principles to **construct an explanation** and represent interactions between energy and matter that lead to the condensation and crystallization of water in the atmosphere and the formation of clouds.

LESSON 10

2 days

Why do clouds or storms form at some times but not others?

Investigation

Changing temperature and humidity inputs changes the size of the thunderstorm developed in a computer simulation.

We use our *Gotta-Have-It Checklist* to test and revise a thunderstorm simulation to produce larger and smaller storms. We focus on temperature and humidity conditions that are likely to produce storms. We think about what additional features we would like to include in the simulation and we design interfaces for those features. We figure out these things:

- A greater difference between near-ground and atmospheric temperatures is correlated with larger storm development.
- Higher humidity is correlated with stronger storms.
- Simulations are models that can represent only parts of a system, which limits their use.

10.A Modify a model—based on evidence—to build a storm system by changing the input variables, such as temperature and humidity, and measuring changes in the output, the size of storm formation.

10.B Evaluate the limitations of the thunderstorm simulation, identifying which aspects of the system are represented in the model and which additional aspects could be added to account for thunderstorm development.

10.C Construct an explanation that includes correlational relationships between temperature and humidity that can be used to predict storm development.

LESSON 11

2 days

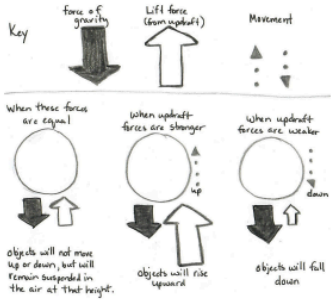
Why don't water droplets or ice crystals fall from the clouds all the time?

Investigation

Tissue paper and a Ping-Pong ball can be suspended in the air by blowing air on them from below. Air blown downward onto a scale or away from it affects the amount of force registered on the scale. A pointer taped to a balloon stretched over the mouth of a jar moves upward when additional force is applied downward on the balloon.

We try to lift or suspend different objects with air blown upward, and we record the weight of different objects and the amount of force registered when air is blown toward or away from a digital scale. We develop a model to show how objects might be lifted, fall, or remain suspended in the air depending on the relative strength of two different forces acting on them. We record the air pressure using a homemade barometer and record the cloud cover and precipitation outside. We figure out these things:

- The more mass something has, the greater the force of gravity pulling down on it (which can be measured as its weight on a scale).
- Moving air (wind) pushes (exerts a force on) matter in its path.
- Air moving upward (updrafts) can keep an object suspended or floating in the air when the force from the molecules in that air colliding with that object counterbalances the downward force from gravity. When those forces are no longer balanced, the object that was suspended will start moving upward or downward.
- A barometer can detect changes in the density of the air outside of it.



11.A Use mathematical thinking and construct an explanation to predict patterns in the relationship between the relative strength of two opposing forces on different objects and the resulting change in motion of those objects.

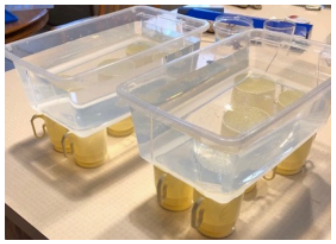
11.B Develop a model to represent balanced and unbalanced forces on an object suspended by an upward current of air, and use the model to predict and explain whether the object would remain suspended (stability) or start moving downward or upward (change) due to the relative strength of the opposing forces.

LESSON 12

2 days

What causes more lift in one cloud versus another?

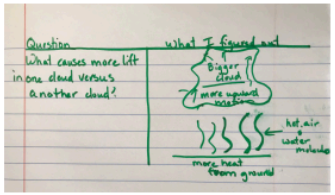
Investigation



Dye added to water in a tub rises and moves differently when different amounts of thermal energy are added to the system.

We plan and carry out an investigation to determine what variables affect the amount of lift produced in a fluid. We explain how the results of our investigation help us understand how differences between air and ground temperatures can cause different amounts of lift and movement of air. We figure out these things:

- When one spot in a fluid heats up, it becomes less dense, which causes it to rise. When it cools down, it becomes more dense and sinks. This leads to circular motion in fluids, called convection.
- The greater the thermal energy input into the fluid, the stronger the lift or convection currents. The more of Earth's surface that is in contact with the air above it, the more thermal energy it can transfer to that air.
- Some winds are the result of this convection. Air at the surface moves toward an area where warmed air rose, filling in the space left behind.



12.A Collaboratively plan an investigation to collect data, identifying independent and dependent variables and controls and how the data are recorded, to serve as the basis for evidence that greater temperature differences between the ground and the air higher in the atmosphere cause greater lift (effect) of air.

12.B Develop a model to represent how varying inputs of thermal energy affect the resulting movement of air (output) to show the relationships among variables that can predict greater lift and movement of air.

12.C Construct an explanation that includes qualitative relationships between variables that predict the movement of a fluid (air), based on the transfer of energy that drives the motion.

LESSON 13

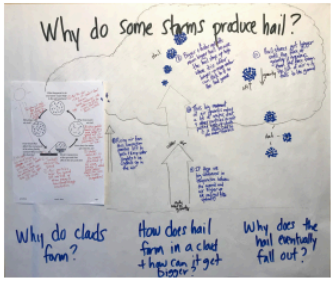
3 days

Why do some storms produce (really big) hail and others don't?

Putting Pieces Together

Different storms produce different types of precipitation (snow, rain, hail). Storms that produce larger hail also produce stronger updrafts.

We add to our Gotta-Have-It checklist and develop a final model to explain why some storms produce hail. We revisit the DQB and discuss the questions that we have now answered. We apply our understanding to a new phenomenon (hurricanes) and individually take an assessment.



13.A Develop and use a model to describe and explain unobservable mechanisms that drive the cycling of matter and the flow of energy into and through the air to cause some storms to produce large hail while others do not.

13.B Construct an explanation, using a model and previously developed science ideas, to explain what causes hurricanes to form, grow, and produce (effect) strong winds and large amounts of rain (cycling of matter and flow of energy).

Mid-Unit Assessment: Lesson 13 Hurricane Model Assessment

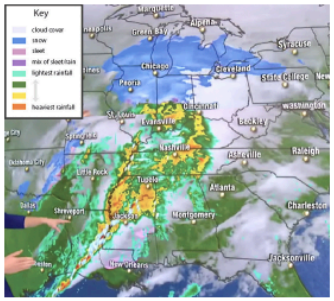
Learning Set 3 (Lessons 14-18):

LESSON 14

2 days

What causes a large-scale precipitation event like this to occur?

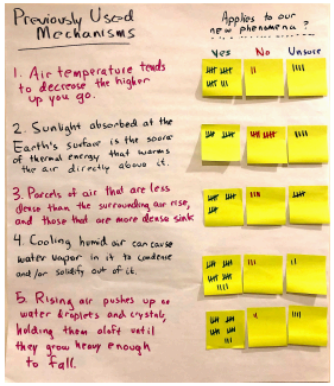
Anchoring Phenomenon



Different forms of precipitation were falling over the midwestern United States on the morning of Saturday, Jan. 19, 2019. A forecast predicts that this storm will produce heavy snowfall and ice accumulation in the northeastern United States by the end of the weekend.

We explore video and maps from three parts of a weather report and forecast from Jan. 19, 2019. We develop a model to explain how what was happening in one part of the country at one point in time can be connected to what is predicted to happen in another part of the country over a day later. We develop questions for our Driving Question Board (DQB). We brainstorm ways we could investigate these questions. We will figure out these ideas:

- Some storms are very large (hundreds of miles across) and can last for many days.
- These large-scale storms can produce different types and amounts of precipitation over different areas.
- Many of the mechanisms we used to explain small-scale precipitation events seem like they could be relevant to explaining large-scale storms too.
- Large-scale storms also may have something to do with large areas of cold air and warm air moving over great distances.



14.A Analyze data using maps of national weather conditions and forecasts to identify temporal and spatial relationships (patterns) between precipitation, cloud cover, temperature, and air pressure.

14.B Develop an initial model to explain how precipitation that is happening in one part of the country at one point in time could be connected (cause/effect) to what is predicted to happen in another part of the country at a later time. Use a previous model to identify mechanisms at the observable and the particle levels to explain the causes of this large-scale weather phenomenon.

14.C Ask questions about possible patterns in and causes for a storm affecting large parts of the country over multiple days or causes shared between this precipitation event and a smaller-scale, shorter-duration precipitation event (a hailstorm).

LESSON 15

2 days

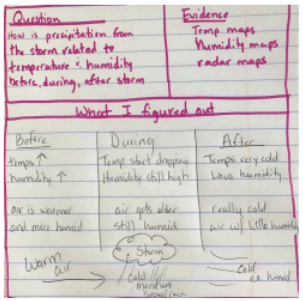
What happens with temperature and humidity of air in large storms?

Investigation

Students analyze temperature, humidity, and radar data to track the progression of the storm and precipitation along the front line.

In this lesson we use temperature, humidity, and radar data across eight-hour increments during the timeline of the storm to track the movement of air and precipitation. We consider how air moves horizontally in large parcels, called air masses, and we also notice that precipitation and storms develop where air masses of different characteristics meet. As a class, we develop different ways of representing what is happening with warm air and cold air across the land. We figure out these ideas:

- Air masses are large parcels of air (hundreds of miles wide) with similar characteristics (e.g., temperature, humidity).
- Air masses move horizontally, such as from west to east across the United States.
- Storms and precipitation can develop where two air masses with different characteristics meet; this boundary is called a *front*.



15.A Use graphical displays of temperature, humidity, and radar data to identify temporal and spatial patterns as air masses interact in a large storm system.

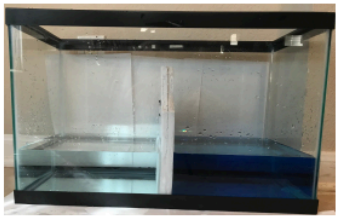
15.B Use an argument supported by empirical evidence and scientific reasoning based on patterns from data and maps to support an explanation that precipitation forms along the boundary of two air masses with different temperature and humidity characteristics.

LESSON 16

2 days

How do warm air masses and cold air masses interact along the boundaries between them?

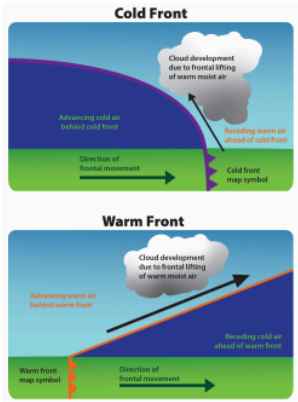
Investigation



When warm water and cold water interact, cold water sinks, pushing warm water upward. This serves as a model for the interactions that occur between warm and cold air masses in the atmosphere.

We carry out an investigation to explore what happens along a frontal boundary where warm air and cold air meet. We develop models to describe interactions between warm and cold air masses and use patterns in data to explain changes in precipitation that can occur when air masses collide. We figure out:

- When a warm air mass moves toward a cold air mass, the warm air slides over the cold air. When a cold air mass moves toward a warm air mass, the cold air pushes into and below the warm air, pushing it up and over. Both interactions cause predictable changes in weather.
- The maximum amount of water vapor that air at a given temperature can hold is referred to as 100% relative humidity.
- The maximum amount of water vapor that can be in the air changes based on the temperature of the air; warmer air can hold more water vapor than colder air.
- Cooling air at 100% relative humidity will cause water vapor to condense out of the air; the greater the decrease in air temperature, the greater the amount of water vapor that will condense out of it.



16.A Develop and use models to observe and describe the complex patterns of change that occur when warm and cold air masses interact in the atmosphere.

16.B Use computational thinking to describe how patterns in data support explanations of the changes in weather that occur where warm and cold air masses interact.

LESSON 17

1 day

Is there a relationship between where the air is rising and where precipitation falls?

Investigation

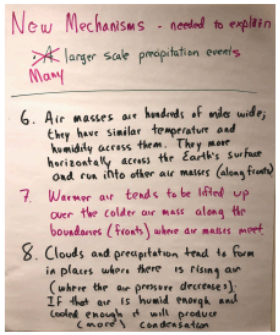
Pressure maps for the United States show different amounts of air pressure in different places at different times. A homemade barometer detects changes in the density of the air outside of it.

We analyze national pressure maps from around the time of the original forecast. We construct an explanation of the patterns we notice among (1) the area of lowest air pressure, (2) the locations of the fronts, and (3) where precipitation would fall. We apply scientific ideas to explain what is causing these three things to be connected to one another. We will figure out these ideas:

- When the air pressure outside decreases, it tends to correspond with the appearance of cloudier skies and in some cases precipitation.
- Large-scale, low-pressure air masses can move and their movement can be predicted.
- The movement and location of warm and cold fronts appear to be connected to this low-pressure center.
- Precipitation tends to fall along the line of the cold front and warm front and behind the low-pressure center.

17.A Analyze data using maps of air pressure recorded over the country at different points in time and forecasts (temporal and spatial relationships) to identify patterns (the movement of low-pressure systems) and the relationship between this (patterns) and the location of fronts and precipitation.

17.B Construct an explanation that includes the qualitative relationships presented in a weather forecast among (1) the area of lowest air pressure and where it will move to, (2) the locations of the fronts, and (3) where

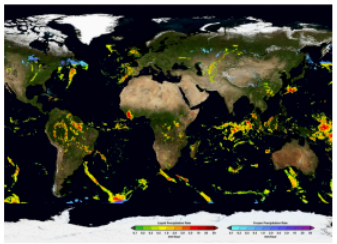
	precipitation will fall, using scientific ideas and principles to explain what would be causing these three things to be connected to one another.
LESSON 18 2 days **How can we explain what is happening across this storm (and other large-scale storms)?** Putting Pieces Together, Problematizing   *A weather forecast shows that three different storm systems were predicted to affect different parts of the United States from the morning of Nov. 22, 2019 into Nov. 27, 2019.* We explore video and maps from three parts of a weather report and forecast from Jan. 19, 2019. We develop a model to explain how what was happening in one part of the country at one point in time can be connected to what is predicted to happen in another part of the country over a day later. We develop new questions for our Driving Question Board (DQB) and brainstorm ways we could investigate these questions. We will figure out these things: • Many storms are due to the path that air masses follow as they are moving, other air masses they interact with along their boundaries (fronts), and how much lift occurs in the air mass or along those fronts. • We have new questions about whether certain weather patterns are typical for different places in our country and what causes any differences in those from one place to another over longer periods of time. 	**18.A** Compare and critique two arguments on the same topic and analyze whether they emphasize similar or different mechanisms (cause) in their explanations of the patterns in how the weather changed (effect) during the Jan. 19, 2019 storm. **18.B** Apply scientific ideas and related evidence to evaluate whether the new mechanisms (air mass movement, interaction of fronts, and low pressure areas [cause]) that were used in an explanation of one large-scale storm are also needed to explain the patterns in the how the weather will change [effect] in the predictions made for three other storms occurring at a different time of year. **18.C** Ask questions about typical patterns and causes related to these in how air masses move across the country and how where a place is located (near the coast or inland, high elevation or low, in the northeast vs. southwest) affects the amount and type of precipitation that the place receives over more than a few years.
Learning Set 4 (Lessons 19-22):	

LESSON 19

1 day

Are there patterns to how air masses move that can help predict where large storms will form?

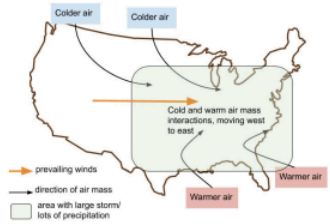
Investigation



Visualized precipitation data reveal predictable patterns in the movement and direction of air masses.

In this lesson, we observe a visualization showing precipitation movement across the United States in a predictable pattern from west to east in most locations. These predictable air movements seem to bring colder air from the north and warmer air from the south. We zoom out to a global view and notice the U.S. pattern is the same as other places in the northern hemisphere and a mirror image of the southern hemisphere. We figure out these things:

- There are patterns in the direction that air and precipitation move over a region.
- Patterns in air movement are caused by prevailing winds and the prevailing winds in the northern hemisphere mirror the southern hemisphere.
- These patterns help us predict where air and precipitation come from (colder from the north and warmer from the south).
- Climate is the long-term average of weather in an area, typically averaged over 30 years.



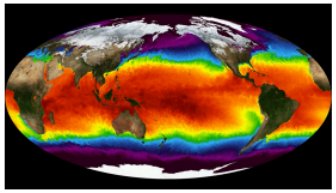
19.A Use visualized precipitation data from a large data set to identify spatial patterns in the direction of air masses movement that influences long-term weather patterns in predictable ways.

LESSON 20

2 days

How do oceans affect whether a place gets a lot or a little precipitation?

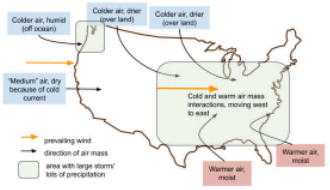
Investigation



Ocean temperatures and currents affect evaporation rates and therefore the temperature and humidity of different air masses.

In this lesson, we come to agreement about the temperature of air masses and the direction of their movement. We gather additional information about the role of the ocean by observing a visualization of ocean temperatures, reading about ocean currents, and interpreting precipitation data for coastal cities. We revise a model for air mass interactions that explain (1) the places where certain kinds of air masses form, and (2) their predictable movements over time. We figure out:

- The ocean is warmer near the equator and cooler near the poles.
- Ocean currents can bring warmers waters toward the poles and cooler waters toward the equator.
- More evaporation occurs over warmer ocean waters.
- The temperature of the ocean affects the humidity of the air moving over it.



20.A Integrate text and media to gather additional information to clarify how ocean currents that circulate cooler and warmer waters to different latitudes affect air mass temperature and humidity.

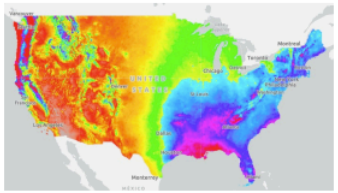
20.B Use sea surface temperature maps and tabular precipitation data to articulate a spatial pattern connecting offshore ocean temperatures to precipitation on land.

LESSON 21

2 days

Why is there less precipitation further inland in the Pacific Northwest than further inland from the Gulf Coast?

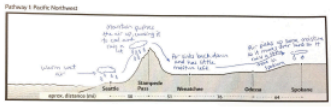
Investigation



Data from five locations along prevailing wind pathways in the Pacific Northwest and Gulf Coast show that changes in elevation are associated with changes in air temperature and precipitation.

We analyze precipitation, temperature, and elevation data at five locations along two different prevailing wind pathways to explore why there is less precipitation further inland in the Pacific Northwest than there is further inland from the Gulf Coast. We model what happens as an air mass moves from above the ocean to locations over mountains and relatively flat landforms. We develop a list of key ideas and data we need to explain climate patterns in places outside of the United States. We figure out:

- Changes in elevation affect the flow of air over the land.
- As elevation increases, the air flowing over the land is forced upward; as elevation decreases the air flowing over the land can fall back downward.
- Air that is forced upward cools as it rises and tends to lose much of the water vapor in it through condensation and precipitation.



21.A Analyze and interpret data to identify patterns in the data to provide evidence of the relationship between elevation (cause), air temperature, and precipitation (effect).

LESSON 22 1 day **How can we explain differences in climate in different parts of the world?** Putting Pieces Together   *South America has both temperate and tropical rainforests, which have high precipitation rates but different average temperatures.* We use our key ideas list from Lesson 21 to explain why the rainforests are located where they are and why they have different climates. We revisit the Driving Question Board and discuss all of our questions that we have now answered.	**22.A** Use graphical displays of global climate datasets (e.g., sunlight, ocean temperature, water and wind movement) to identify relationships between the transfer of energy and the cycling of matter that explain the location and climate of rainforests around the globe.
Final Assessment: Lesson 22 Rainforest Climate Assessment	

Additional Resources:

- Driving Question Board
- Question Formulation Technique (QFT)
- KQL
- Talk Activities
- Summary Table
- Final Scientific Modeling
- Final Scientific Modeling
- CCC Discussion Cards
- 321 Strategy active viewing
- 60 Formative Assessment Ideas
- CER

Unit Overview	
Unit Title:	Plate Tectonics & RockCycling (OpenSciEd Unit 6.4)
Author(s):	Lindsay Davenport
Grade Level/Course:	Grade 6/Science
Length/Dates:	8 weeks (approximate timeline is Mid-April - June)
Unit Summary: 2-4 sentences describing the main ideas, content and skills of the unit.	In this unit, students investigate the 2015 Himalayan earthquake, discovering that Mt. Everest is growing in elevation and shifting northeast, prompting questions about changes in other mountains. They analyze data from five additional peaks, finding some growing, shrinking, or remaining stable, and develop an initial model for how mountains can change. Students then explore earthquakes, examining how vertical and horizontal shifts relate to mountain movement. Through plate movement data and models, they conclude that moving tectonic plates cause earthquakes, which in turn are correlated with changes in mountain elevation and position.

Performance Expectations *(This unit builds toward these performance expectations)*

MS-ESS1-4:
Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.

MS-ESS2-2:
Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.

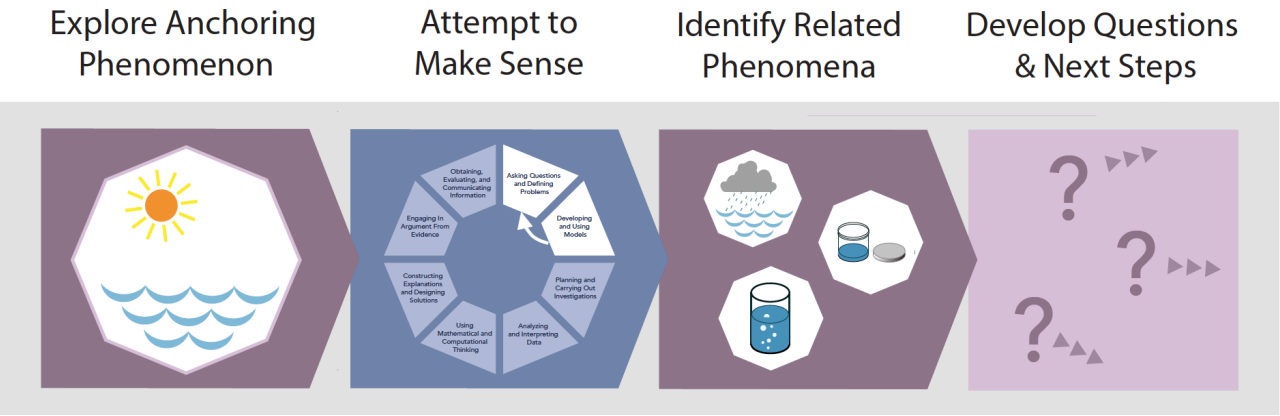
MS-ESS2-3:
Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.

MS-ESS2-1:
Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.

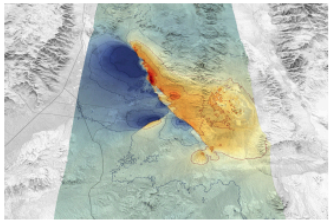
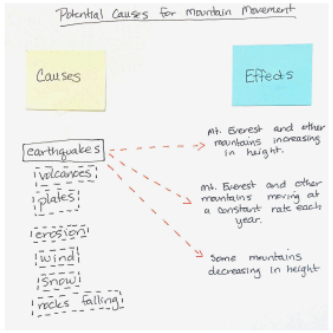
SEP Implications (Science and Engineering Practices)	DCI Implications (Disciplinary Core Ideas)	CCC Implications (Cross Cutting Concepts)
Developing and Using Models: This unit **intentionally develops** this practice. While students have engaged with the elements of this practice in earlier units, they are applying these elements in models at a much larger temporal and spatial scale than before. In *Cup Design Unit*, students develop particle level models of a concrete phenomenon they can manipulate. In *Storms Unit*, students continue to develop this practice to a larger context that is unobservable both at a micro and macro scale when they model a storm system. In this unit, students further develop this practice as they develop, revise, and use models multiple times over the course of the unit to explain the causal relationship between plate movement, erosion forces and changes to the surface of Earth. Student models become more sophisticated over the course of the unit as they continue to collect evidence supporting causal changes to Earth. **Using Mathematics and Computational Thinking:** This unit **intentionally develops** this practice. Students engage with mathematical reasoning as they grapple with what Earth looked like in the past. Using rate of plate movement, students determine where the continents could have been in the past. Students also engage in a new aspect of mathematical and computational thinking as they work with representations of very large data sets through computer interactives. To support this practice, aspects of the simulations are slowly added to allow students to analyze the data that is being represented over the course of the unit. Students engage with these simulations in Lesson 2, 3, 4, 5, 12. **Constructing Explanations and Designing Solutions:** This unit **intentionally develops** this practice. As students carry out investigations and analyze data to collect evidence, they construct explanations at pivotal places in the unit to explain causal relationships between changes to Earth's surface and processes being investigated. These explanations draw on the new idea that is this unit's focus, that theories and laws that describe the natural world operate today as they did in the past.	**ESS1.C. The History of Planet Earth** **The geologic time scale interpreted from rock strata provides a way to organize Earth's history. Analysis of rock strata and the fossil record provide only relative dates, not an absolute scale.** Students will engage in an analysis of layers to determine that older material is below younger material. Students, using mathematical reasoning, determine the time period from which we should gather data, and analyze rock strata and fossil data to determine the location of past continents from the specified time period. **ESS2.A. Earth's Materials and Systems** ● **All Earth processes are the result of energy flowing and matter cycling within and among the planet's systems. This energy is derived from the sun and Earth's hot interior. The energy that flows and matter that cycles produce chemical and physical changes in Earth's materials and living organisms.** Students determine that the energy derived from the sun is the main driver of erosional forces above the surface of Earth, and the magma is moving due to the energy derived from Earth's hot interior. These processes cause changes to Earth's materials (above and below the surface). ● **The planet's systems interact over scales that range from microscopic to global in size, and they operate over fractions of a second to billions of years. These interactions have shaped Earth's history and will determine its future.** Students analyze plate interactions from large spatial and temporal scales and compare them to annual rates of plate movement and erosional forces to determine that the processes of mountain creation and destruction occur over millions of years. Students use the understanding that these interactions have happened in the past and will continue to do so in the future to explain why a marine fossil found on Mt. Everest will not always be there. Students also learn about the causes and why earthquakes are such sudden events, and about how small erosional rates can add up over thousands to millions of years. **ESS2.C. The Roles of Water in Earth's Surface Processes** **Water's movements—both on the land and underground—cause weathering and erosion, which change the land's surface features and create underground formations.** Students learn about erosional rates on mountains and develop an understanding that the movement of water and wind cause weathering and erosion. These forces add up over time to change the land's surface and can decrease the size of mountains that are experiencing uplift at a lower rate than erosion. Erosion can also cause changes like the rounding out or wearing down of surfaces over time. **ESS1.C. The History of Planet Earth** **Tectonic processes continually generate new ocean sea floor at ridges and destroy old seafloor at trenches. (HS.ESS1.C GBE),(secondary)** Students analyze data from the Mid-Atlantic Ridge and plate movement data to determine that the seafloor and Atlantic Ocean is getting wider in that location. Students generalize this out to determine that over time, as plates move away from each other, new seafloor is created at ridges. Students analyze interactions at the Andes and determine that seafloor is also destroyed over time as plates move together. This occurs at all of our trenches.	**Cause and Effect:** This crosscutting concept is **key to the sensemaking** in this unit. This unit follows a thread of causal and correlational relationships in connection with mountain change. Students begin the unit by brainstorming potential causes of mountain movement - such as earthquakes, volcanoes, erosion, etc. Then through the unit they investigate how each of these processes happens and the effect they have on Earth. **Scale, Proportion, and Quantity:** This unit **intentionally develops** this crosscutting concept. Through the unit, students routinely work with scales that are too small or large to be observed in our given space and over our lifetimes. Students consider how plate movement happens very slowly, but over the course of millions of years, large plates can move great distances and at scales that can be seen globally. Students also learn how erosion happens very slowly and at a small scale, but can make larger changes over geologic time. Students also use proportional relationships to guide their mathematical and computational thinking about plate movement processes. **Stability and Change:** This unit **intentionally develops** this crosscutting concept. Throughout the unit, students consider the small changes that occur to Earth's surface yearly (such as the plate movement rate, or rates of erosion versus uplift) to

Initially students construct explanations about relationships between earthquakes and mountains changing. Then they construct an explanation about relationships between ***plates moving***, and earthquakes and mountains moving. Eventually, at the end of the unit students can explain the relationship between processes above and below the surface and how they shape Earth, and show how the evidence is adequate for their explanations. **Analyzing and Interpreting Data**: This unit **intentionally develops** this practice. Students' data analysis focuses on a new aspect of analyzing data to distinguish causal from correlational relationships in data). Throughout the unit students investigate different potential causes for changes to Earth's surface that happen below and above the surface. As students investigate this they differentiate between causation and correlation and draw on these data interpretations in their models and arguments. The following practices are also **key to the sensemaking** in the unit: ● Asking Questions and Defining Problems ● Engaging in Argument from Evidence	**ESS2.B. Plate Tectonics and Large-Scale System Interactions** **Maps of ancient land and water patterns, based on investigations of rocks and fossils, make clear how Earth's plates have moved great distances, collided, and spread apart.** Students speculate that Africa and South America were once touching. They use data from their mathematically derived time period of when they might have been touching to explain that there are patterns across continents based upon rocks, fossil, land, and water patterns from before 146 million years ago. Students then wonder if all plates were once in different places, and use the data listed to determine that Earth's land masses have moved great distances, collided, and spread apart.	determine that while we cannot see these changes from day to day, we can see these changes over larger temporal and spatial scales. Students also focus on a new aspect of stability and change when they investigate earthquakes to determine that they are sudden events that are the result of gradual changes that add up over time. The following crosscutting concept is also **key to the sensemaking** in the unit: ● Patterns

Phenomenon



Unit Question: What causes Earth's surface to change?

Driving Questions	Lesson Level Phenomena	Activity	Learning Targets
Learning Set 1 (Lessons 1-9):			
LESSON 1 4 days **What is causing Mt. Everest and other mountains to move, grow, or shrink?** Anchoring Phenomenon	 *Mount Everest and other mountains change in height and location.*	We read about how Mt. Everest is getting taller and moving yearly to the northeast. We analyze other mountain peaks around the world and find that other mountains are also getting taller, but others are shrinking. We develop an initial model explaining how mountains grow, move, and shrink. We brainstorm related phenomena, ask questions, and generate a list of data and information we need to better understand how mountain peaks can grow, shrink, and move. We figure out: • Some mountains move. • Mountains can get taller. • Mt. Everest is growing over time - new data shows. • Mountains can also shrink.		**1.A** Develop a model showing what is happening at a scale larger than we can see (patterns) to help explain what happened to the different mountains to (cause) them to change (in elevation and/or location). **1.B** Ask questions that arise from our analysis of information showing that Mt. Everest and four other mountain peaks are changing to seek additional information about what caused the changes (effects) we read about.
LESSON 2 2 days **How are earthquakes related to where mountains are located?** Investigation	 *After an earthquake occurred in Ridgecrest, California, a shift in the location and the elevation of the surface was observed.*	We look at data sources from Ridgecrest, CA before and after an earthquake. We use Seismic Explorer to determine that there seems to be a pattern with greater earthquake activity at mountains that are increasing in elevation. We figure out: • The ground moves back and forth in an earthquake. • Some parts of the surface crack open with a noticeable difference in between the ground on either side of the crack after an earthquake. • Earthquakes exist on or near almost all mountain ranges. • There seems to be a correlation between when mountains were highest or growing and where the eqs are the largest or most frequent. • While earthquakes seem to be correlated to changes in elevation, we are uncertain what is occurring under the surface, and what the land is like under the surface.		**2.A** Present an oral and written argument that earthquakes either caused or are correlated to the elevation and location changes of the mountain cases and Ridgecrest, California. **2.B** Use digital tools to examine a large data set at different spatial and temporal scales to compare global earthquake activity to local activity.

LESSON 3

2 days

How does what we find on and below Earth's surface compare in different places?

Investigation

The properties of solid rock, bedrock, change as we move deeper underground due to increasing pressure and heat.

After we figure out that earthquakes are correlated to mountain changes, we wonder what is happening underground where earthquakes occur and what we will find at and below the surface in different places around Earth. We develop models and gather data from various media and investigations about the structure and composition of materials at and below the surface. We share observations and data and update our Progress Trackers. We figure out:

- Sediment and solid rock make up Earth's surface.
- Solid rock, known as bedrock, is found on, near, or below the surface of Earth.
- As we move deeper underground, rocks become increasingly hotter and compressed.
- This can cause rocks to change state, and tend to more readily move and shift.
- The rock deep below the ocean bottom is denser than the rock deep below the continents.

3.A Develop and use models to describe the structure, composition, and temperature of materials below the surface of Earth, and some of the processes (pressure and heat) that cause changes to those earth materials.

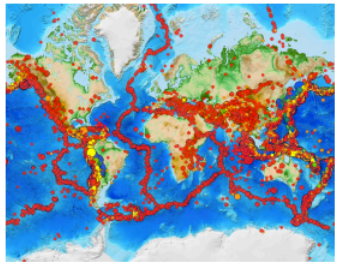
3.B Construct a scientific explanation based on evidence from text, media, and investigations to explain changes that occur to materials below the surface of Earth that are not directly observable.

LESSON 4

2 days

What is happening to Earths' surface and the material below it during an earthquake?

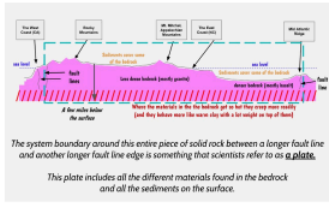
Investigation



Plates on Earth's surface are surrounded by long lines of fault lines. There are many plates that make up the surface of Earth.

We develop a profile view model of Ridgecrest. We use a foam board to model the bedrock and determine the break in the land must go all the way through the bedrock. We analyze the area of the earthquake by making a cross section in Seismic Explorer. We develop a profile model of North America. We determine that the big sections of Earth between long fault lines are plates. We look at a world map for where there could be other plates on the map. We figure out:

- Sections of bedrock in between the fault lines of cracks from earthquakes are called plates.
- These cracks go down through the bedrock to where the rock begins to creep and move.
- There are other plates in the world that can be found in between the lines of other long sections of fault lines.
- Models of the crust and mantle have scale limitations due to the size of the Earth and



The system boundary around this entire piece of solid rock between a longer fault line and another longer fault line edge is something that scientists refer to as a plate.

This plate includes all the different materials found in the bedrock and all the sediments on the surface.

4.A Develop a profile model across the North American plate to explain the changes seen in bedrock after an earthquake by showing what is found at and below the observable surface.

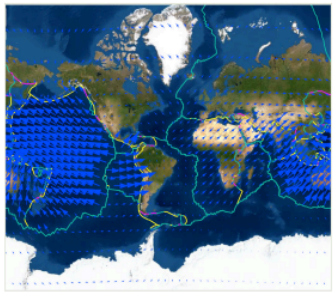
4.B Construct an explanation using qualitative evidence from class investigations to explain what is happening to the bedrock below the observable surface when an earthquake causes a shift or break in the land.

LESSON 5

1 day

How does plate movement affect the land around mountains such as Mt. Everest?

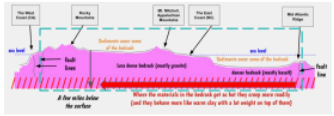
Investigation, Putting Pieces Together



Plates on Earth move at constant speeds and in specific directions.

We look for patterns in GPS data to examine land movement around Mt. Mitchell, and use a physical model to demonstrate that the entire North American plate moves at a constant speed and in a specific direction. We further revise a cross section model of the North American plate from the previous lesson to connect its movement to the behavior of the deeper, hotter bedrock. We use Seismic Explorer to investigate the movement of all plates on Earth's surface. We figure out:

- All plates are constantly moving in different directions and at different speeds.
- Plates move because they sit on top of deeper, warmer rock layers which move, or creep.
- When creep occurs, mountains and all other features on the plate above also move.



5.A Analyze a graphical display of a large data set of plate movement in order to determine whether a causal or correlational relationship exists between plate movement and mountain movement.

LESSON 6

3 days

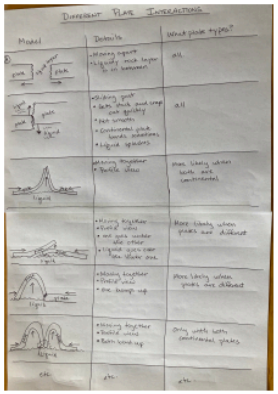
How could plate movement help us explain how Mt. Everest and other locations are changing in elevation?

Investigation, Putting Pieces Together

When plates on Earth move, they can move together, move apart or slide past each other. Sometimes one plate goes under another and/or pushes another plate up.

We use models of plates and plate movement to identify and describe in detail the results of plate interactions between plates of similar or differing densities, and develop drawn models to communicate our findings. We use the models we develop to help explain what might cause the elevation changes and other changes we know about at Mt. Everest. We consider how earthquakes could be a result of uneven plate movement. We celebrate how many questions we can now answer from the DQB. We figure out:

- When plates move towards each other, they collide and mountains can get taller.
- Plates can move next to each other in opposite directions.
- Plate boundaries or edges are rough and so when they interact they can get stuck against each other or slip against each other which we can feel as earthquakes.
- Plate movements cause earthquakes.
- Plate movements can cause mountains to get taller.



6.A. Develop and use models showing what is happening at varying spatial and time scales to describe how plates interact at plate boundaries.

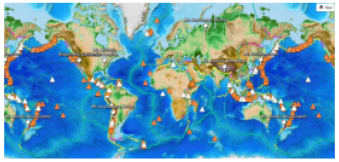
6.B. Construct an argument supporting a model of how plate interactions could cause mountains and earthquakes.

LESSON 7

1 day

What happens at mountains where we see volcanic activity?

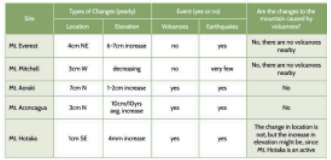
Investigation



Volcanoes occur where oceanic plates collide with continental plates. Volcanoes can either build up or destroy landforms when they erupt.

In this lesson, we use map images to determine that most volcanoes occur along the boundary between oceanic and continental plates. We observe and describe what happens when a denser oceanic plate collides with a less dense continental plate. We revisit our mountain cards from Lesson 1, and read to figure out that volcanic eruptions can either add new earth material to existing landforms or destroy them. We update our Potential Causes for Mountain Movement Chart. We figure out:

- Volcanoes occur in lines where an oceanic plate collides with a continental plate.
- When an oceanic plate collides with a continental plate, the oceanic plate moves under the continental plate.
- The oceanic plate heats up, causing the bedrock and sediments to melt and the water in the sediments to boil.
- The melted earth materials and steam move upward through openings called volcanoes in the continental plate.
- Volcanic eruptions can cause mountains to grow or shrink in height.



Site	Types of Changes (yearly)		Event (yes or no)		Are the changes to the mountain caused by volcanoes?
	Location	Elevation	Volcanoes	Earthquakes	
Mt. Everest	4cm NE	6-7cm increase	no	yes	No, there are no volcanoes nearby
Mt. Mitchell	3cm W	decreasing	no	very few	No, there are no volcanoes nearby
Mt. Aoraki	7cm N	1-3cm increase	yes	yes	No
Mt. Aconcagua	3cm N	10cm/10yrs avg. increase	yes	yes	No
Mt. Hotaka	1cm SE	4mm increase	yes	yes	The change in location is not, but the increase in elevation might be, since Mt. Hotaka is an active

7.A Apply scientific ideas and evidence to construct an explanation for the processes that cause some of the large scale interactions of Earth's plates that result in the effects (volcanoes) of those interactions.

LESSON 8

2 days

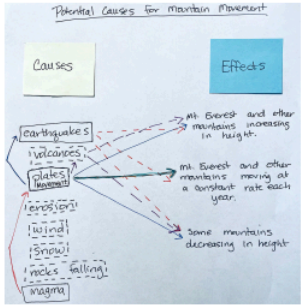
What is occurring at locations where two plates are moving away from each other?

Investigation

Steaming cracks in the ground can be found along the Mid-Atlantic Ridge in Iceland.

We make claims about what could be occurring at the Mid-Atlantic Ridge. We collect evidence to determine if the claims are supported or refuted by evidence. We use our knowledge of the ridge, volcanoes, and the presence of magma to update our Potential Causes for Mountain Movement chart. We figure out:

- Plates are moving apart along the Mid-Atlantic Ridge.
- Scientists call the place where two plates are moving apart a ridge.
- Magma from the mantle is pushing up from under the plate, which can be seen in places like volcanoes and fissures in Iceland and along ridges.
- New oceanic plate material is formed at ridges.
- Magma pushes on plates causing plates to move, which changes mountain elevation and location over time.



8.A.1 Support or refute a claim orally and in writing, based on evidence from multiple locations over a large distance along the ridge to explain what is happening where two plates are moving apart.

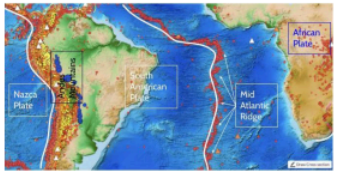
8.B Compare data and evidence from the case cards and the Mid-Atlantic Ridge to determine that volcanoes are correlated with some cases of mountain change, but not the cause of all mountains changing.

LESSON 9

1 day

What causes mountains to change?

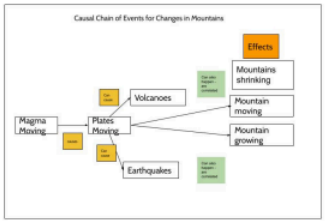
Putting Pieces Together



Mountains change due to plates moving caused by magma moving.

We revisit our Potential Causes for Mountain Movement chart to take stock of what we have figured out. We revise this chart to capture the causal chain of events that need to occur for a mountain to move or grow. We revisit the DQB to see what questions we can answer and we make predictions about what we think the Andes mountains and the Mid-Atlantic Ridge will look like in the future and what it looked like in the past. We figure out:

- Plates move because the magma underneath them is moving.
- Plate movement causes changes to mountains.



9.A Construct an explanation using representations on the Causal Chain of Events poster to explain how the causal (not correlational) events lead to a mountain changing in elevation or location.

Learning Set 2 (Lessons 10-14):

LESSON 10

1 day

Where were Africa and South America in the past?

Investigation

The distance between continents has been increasing over time.

We use math to determine that Africa and South America could have been together 146 million years ago and reason out data from this time period will be found underground. We look for patterns in mapped data across the continents from this period. We then complete an exit ticket to make a claim about the two plates touching. We figure out:

- Oceanic plates that were created over time were not always in existence.
- Average rates of plate movement and plate direction can be used to determine where plates were once located.
- Small changes to the distance between continents can add up to larger visible changes seen from a larger scale.
- Older rock and associated fossils can be found under younger rock and fossils.
- To support that two land masses were once together, patterns in data across the two land masses need to be similar or the same.
- Data from rock strata, fossils, and other changes in land supports that the African and South American continents were once together at the Mid-Atlantic Ridge.

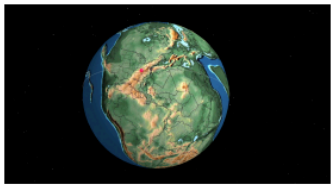
10.A Analyze maps displaying patterns of large sets of data to determine that Africa and South America could have been touching at the Mid-Atlantic Ridge (spatial relationship) between roughly 125 and 146 million years ago.

LESSON 11

2 days

Where were the other plates located in the distant past?

Investigation, Putting Pieces Together

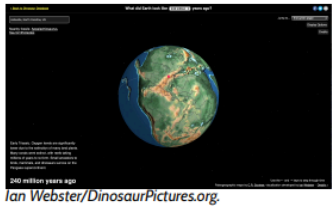
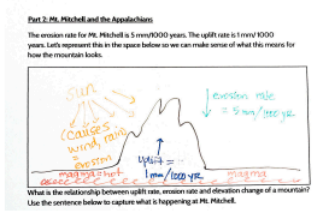


Continental plates have moved over the surface of the spherical Earth over many millions of years, resulting in their current locations on the globe.

We use multiple types of data from models of all the land masses as evidence to develop a flat map model that predicts where the land masses used to be located relative to each other millions of years ago. We identify and discuss the strengths and weaknesses of the evidence supporting our model. We diagram our model and the data that supports it, and articulate our reasoning to explain the positions of the land masses millions of years ago that are predicted by the model. We figure out:

- All major land masses were once touching, forming a part of a large single landmass that existed hundreds of millions of years ago.
- Multiple sources of data are necessary to determine where plates were located in the past.

11.A Construct an explanation of changes in the global position of land masses over time including reasoning that shows how rock strata and fossil evidence adequately supports a map of where Earth's land masses (parts of plates that were not created or destroyed as plates were moving) were located millions of years ago.

LESSON 12 1 day **Where did mountains that aren't at plate boundaries today, like the Appalachians and Urals, come from?** Putting Pieces Together, Problematizing	 *The Appalachian Mountains are decreasing in elevation, and the Ural Mountains are neither increasing nor decreasing in elevation.*	We use map images and data to compare the mountain sites we are studying. We remember that the Appalachians are decreasing in elevation, while the Urals are neither increasing nor decreasing. We know that colliding plates cause mountains to form and increase in elevation, but the Appalachians and the Urals are not located near plate boundaries. We use evidence from an online simulation to construct an explanation for how and when the Applachians and the Urals were formed. We figure out: • The Appalachian Mountains, first formed 470 million years ago, and the Ural Mountains, formed more than 300 million years ago, were both created in the same way that other mountains were formed--through plate collisions. • Plate interactions cannot explain why the Appalachians are decreasing in elevation or why the Ural Mountains are neither increasing or decreasing in elevation.	 *Ian Webster/DinosaurPictures.org.*	**12.A** Construct a scientific explanation based on evidence from a model that colliding tectonic plates caused the formation of the Appalachian Mountains and the Ural Mountains at time and spatial scales that are not observable.
LESSON 13 1 day **What causes mountains to shrink in elevation?** Problematizing	 *Scientists can measure both the rate of uplift and the rate of erosion at different mountain sites.*	After recalling what we already know about erosion and weathering, we read about erosion rates and how scientists use these rates to determine how erosion is changing the surface. Then, using both the erosion rates and uplift rates for Mt. Everest and Mt. Mitchell, we develop a representation of each model and how these two processes are affecting them. We determine that when erosion rates are higher than uplift rates, like at Mt. Mitchell, a mountain will shrink in elevation. We figure out: • The relationship between the erosion rates above the surface and the uplift rates below the surface determine the elevation above sea level. • Erosion rates greater than uplift rates result in decreases in elevation, erosion rates less than uplift rates result in increases in elevation, and erosion rates equal to uplift rates results in no elevation change.		**13.A** Apply mathematical concepts (proportional relationships and unit rates) from the unobservable processes of erosion and plate movement over time to figure out how much Mt. Everest and Mt. Mitchell are changing now and use these to predict how much they would change in the future.
LESSON 14 2 days **How is there an exposed marine fossil on Mt. Everest? And, what other remaining questions from our Driving Question Board can we now answer?** Putting Pieces Together	 *Ancient marine fossils can be found at the top of many mountains.*	We revisit our Driving Question Board and determine what questions we have made progress on. We explain our related phenomena. We revisit our mountain cards to determine that we still need to explain the presence of marine fossils on mountains. We gather evidence to help support what is occuring for marine fossils to end up on mountains and take an assessment. We then revisit our Driving Question Board and answer our unit question. We figure out that: • Plate movement has caused uplift to occur at mountains, pushing up rocks that used to exist on ancient seafloors. • Over time, marine fossils from the ancient seafloor are exposed due to erosional processes. • Erosional processes will always be occurring and will continue into the distant future.		14.A Develop and use a model to show the tectonic process of uplift can create mountains at a time scale too large to see. 14.B Construct an explanation based upon prior investigations and evidence that gradual changes have caused marine fossils to become exposed on mountains due to erosion (accumulating) over time, and those gradual changes will lead to the destruction of the marine fossils due to erosional processes over time.
Final Assessment: Lesson 14 Fossil Assessment				

Additional Resources:

- Driving Question Board
- Question Formulation Technique (QFT)

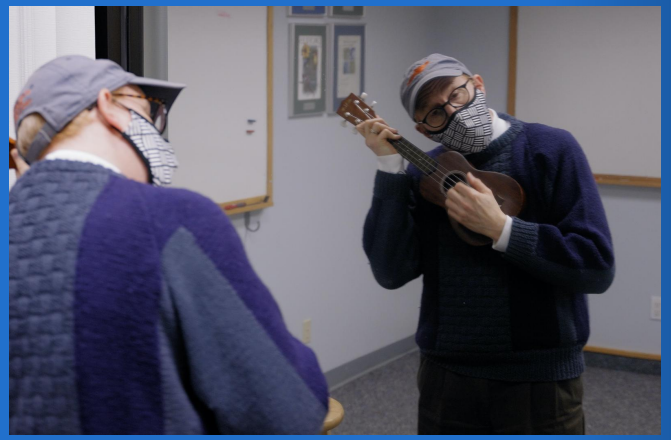
- KQL
- Talk Activities
- Summary Table
- Final Scientific Modeling
- Final Scientific Modeling
- CCC Discussion Cards
- 321 Strategy active viewing
- 60 Formative Assessment Ideas
- CER

Grade 6 Science:

Unit 1: Light and Matter

Anchoring Phenomenon

Students watch a **puzzling video** of a music student who can see his reflection in what seems to be a mirror. The student doesn't see the teacher on the other side of the mirror, but the teacher can see through it like a window.

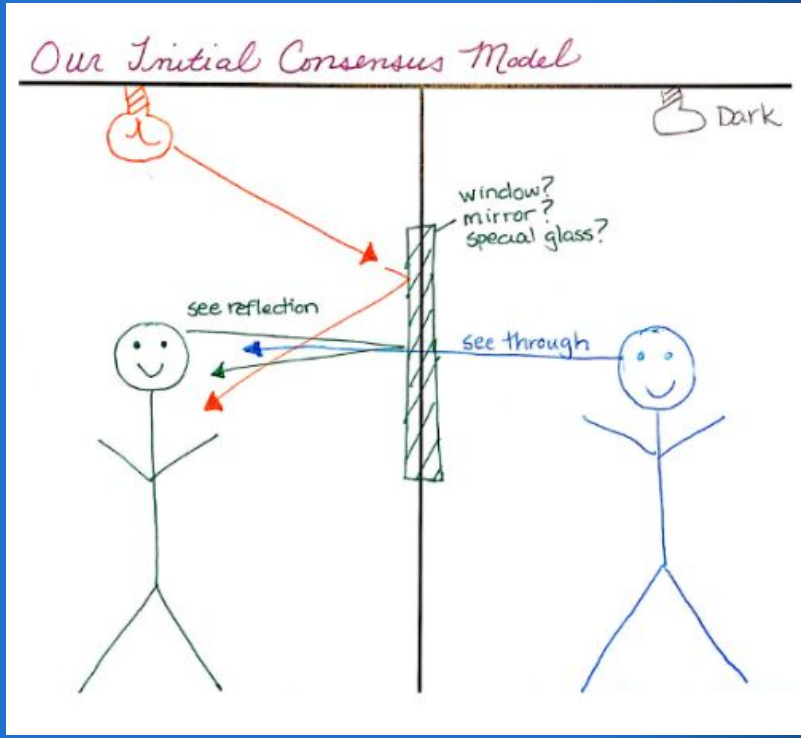


Anchoring Phenomenon

Students wonder how something can act like a mirror and window at the same time. They jump right in and investigate the system using a **box model** that represents it.

Anchoring Phenomenon

They wrap up the lesson by developing an **Initial Class Consensus Model**, brainstorming related phenomena, and developing a Driving Question Board and ideas for future investigations.



Learning Sequence

Driving question: Why do we sometimes see different things when looking at the same object?

Lesson Set 1: *Why do we sometimes see different things when looking at the same object?*

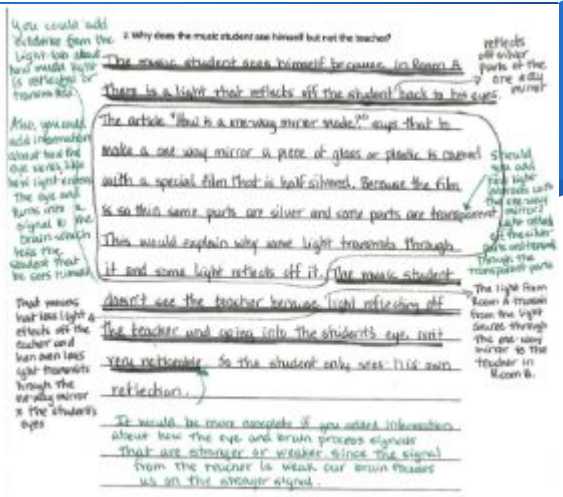
Lesson 1	Lessons 2-4	Lessons 5-6	Lessons 7-8
Students watch a video of an interesting object that acts as a mirror from one side and a window from the other side. They set up a box model to make observations and test ideas about the phenomenon.	Students investigate how changing the light affects the phenomenon, how much light is transmitted through and reflected off the one-way mirror, and how the one-way mirror is structured.	Students develop a model to explain how light interacts with the one-way mirror and then develop a more complete model to explain how the eye-brain system processes light inputs to the eye.	Students construct an explanation for the one-way mirror phenomenon and apply ideas about the one-way mirror phenomenon to explain related phenomena they experience everyday.

Unit Investigations and Tasks

Throughout the unit, students will do the following:

- Develop a shared set of classroom norms to guide their work together.
- Ask questions about the one-way mirror phenomenon that they investigate in the classroom by (1) manipulating light in the scaled box model, (2) measuring transmitted and reflected light off different materials, and (3) obtaining information from readings and videos.
- Agree upon and develop models to explain how light interacts with the one-way mirror, glass, regular mirrors, the eye, and the brain.
- Use a model to explain how the one-way mirror acts like a mirror on the light side of the system and acts like a window on the dark side of the system.
- Apply to an everyday phenomenon the science ideas and models developed for explaining the one-way mirror.

Assessment Highlights



Mid-Unit Assessment:
Lesson 7 Written Assessment
Final explanation

Final Assessment:
Lesson 8 Model Assessment:
Portraits Through Glass

Mangostar / Shutterstock

Grade 6 Science:

Unit 2: Thermal Energy

Anchoring Phenomenon

This unit on thermal energy transfer begins with students testing whether a new plastic cup sold by a store keeps a drink colder for longer compared to the regular plastic cup that comes free with the drink.

Staying Cool

I've been buying iced drinks for years using the regular cup, but my drink always warms up and waters down. The designers of the fancy cup claim the cup can keep a drink colder for longer.

Turn and Talk

- Why does the drink in the regular cup warm up?
- How could the fancy cup keep the drink from warming up?

Anchoring Phenomenon

Students find that the drink in the regular cup warms up more than the drink in the special cup. This prompts students to identify features of the cups that are different, such as the lid, walls, and hole for the straw, that might explain why one drink warms up more than the other.

The Cup Systems

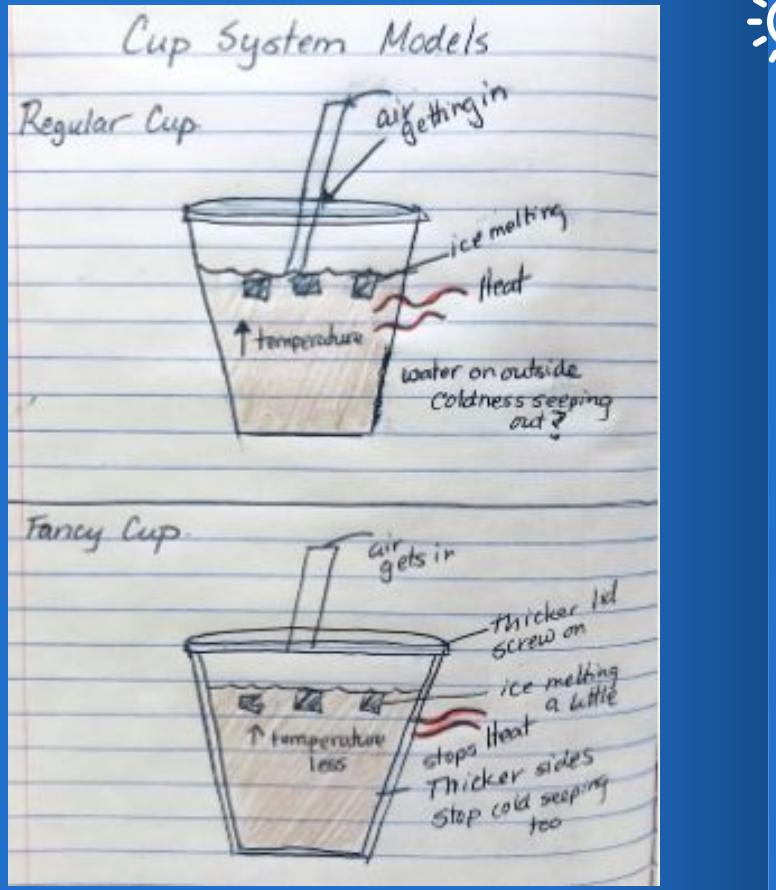
Fancy cup Regular cup

	1	10	20	30	Temp change
Regular cup	5.5	6.5	8.0	9.0	+3.5°C
Fancy cup	5.5	6.0	7.0	7.8	+2.3°C

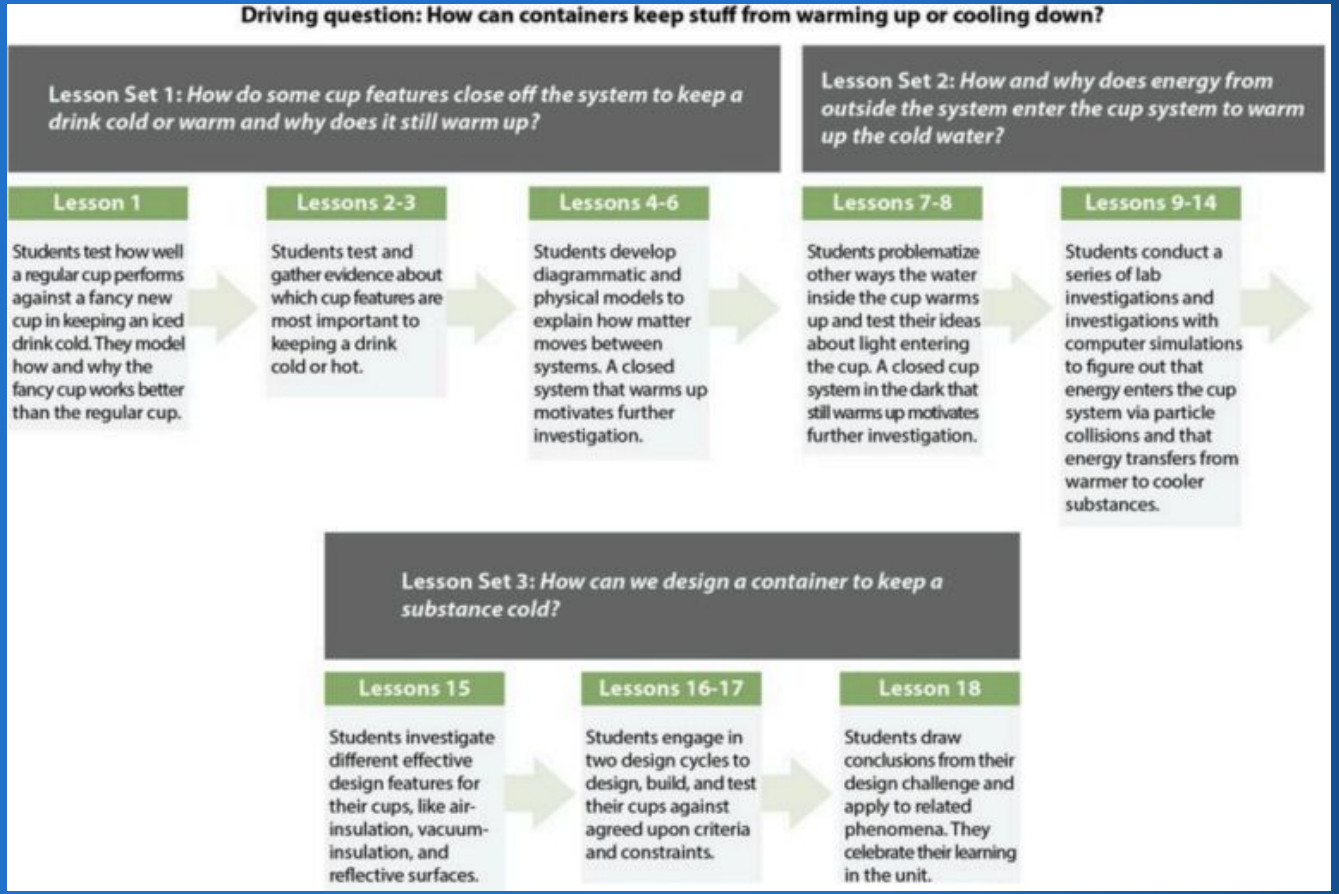
Why does one cup system keep water cold for longer than the other cup system?

Anchoring Phenomenon

They wrap up the lesson by developing an **Initial Class Consensus Model**, brainstorming related phenomena, and developing a Driving Question Board and ideas for future investigations.



Learning Sequence



Unit Investigations and Tasks

Throughout the unit, students will do the following:

- build on what they know about the particle nature of matter from 5th grade to develop a particle model of solids, liquids, and gases that include both structure and movement of particles as it relates to the temperature of the substance.
- plan and carry out investigations to systematically test the different parts of the cup system, tracking the flow of matter and energy into or out of the cup system.
- develop a model of temperature as the average kinetic energy of a group of particles.
- model the transfer of energy from light to kinetic energy of particles when light is absorbed.

Unit Investigations and Tasks (continued)

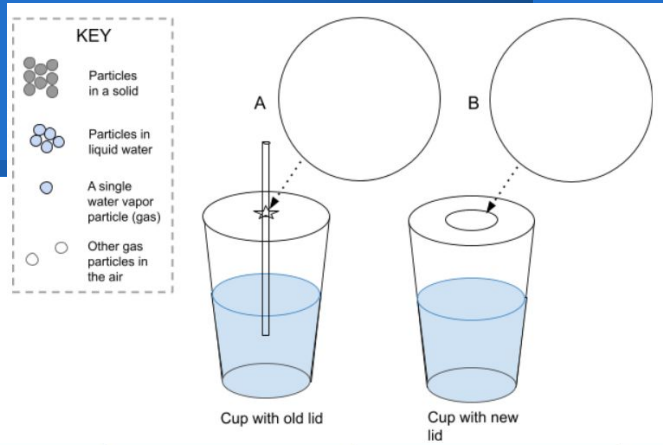
Throughout the unit, students will do the following:

- model thermal energy transfer between substances through particle collisions, or conduction, to change the average particle motion in a substance.
- revise their models to include factors that minimize energy transfer by reducing the absorption of light and decreasing the opportunities for particle collisions.
- apply what they have learned about features that can slow energy transfer to design, build, test, and revise a cup system to keep a drink cold.

Assessment Highlights

Mid-Unit Assessment:
[Lesson 6 Explaining the Effect of Different Lid Designs]

Final Assessment:
[Lesson 18 Disaster Blanket Design]



			
Blanket type	U.S. Military disaster blanket	Emergency blanket	Fleece blanket
Material description	Double layer, dense wool	Single layer, thin mylar	Single layer, fleece
Color and texture	Grey, soft	Shiny on one side, smooth	Dark grey, soft
Weight	3 pounds (lb)	0.25 pounds (lb)	1 pound (lb)

Grade 6 Science:

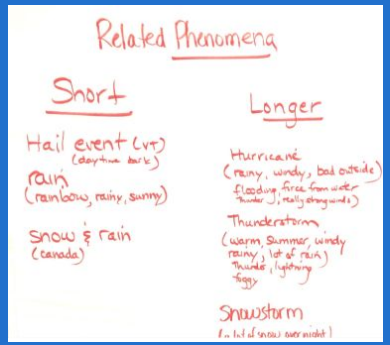
Unit 3: Weather, Climate, & Water Cycling

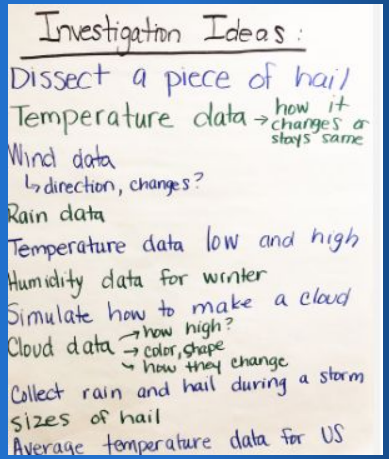
Anchoring Phenomenon

Students observe three video clips of hail falling in different areas of the United States on different days. They develop a model to try to explain what causes this to occur.

Anchoring Phenomenon

Then, they develop questions for a Driving Question Board (DQB) about the mechanisms that cause different kinds of precipitation events. They brainstorm related phenomena, possible future investigations, and sources of data that could help them figure out answers to their questions.





Learning Sequence

Driving question: Why does a lot of hail, rain, or snow fall at some times and not others?

Lesson Set 1: *What is the air outside like when this happens?*

Lesson 1
Students observe three video clips of hail falling in different places on different days.

Lessons 2-3
Students analyze weather data from locations where hail occurred and from air temperature profiles of the atmosphere.

Lessons 4-5
Students collect data on light levels, surface temperatures, and air temperature from places outside, and observe changes in air volume that result from heating and cooling the air.

Lesson 6
Students apply what they figured out in Lessons 2 through 5 to explain the movement of air in a hail cloud over time.

Lesson Set 2: *Why do some clouds produce precipitation and others don't?*

Lesson 7
Students read about what is in the air and carry out investigations to determine how the transfer of energy to different surfaces affects the humidity in the air above them.

Lessons 8-9
Students investigate how a droplet grows when air is cooled. They model particle-level interactions in a phase change and they read about what is in the clouds.

Lesson 10
Students apply what they figured out in Lessons 2 through 9 to critique a computer simulation of thunderstorms.

Lessons 11-12
Students investigate and model what causes objects to float, fall, or rise up through the air and carry out an investigation to determine the amount of lift produced from heating or cooling a fluid.

Lessons 13
Students apply what they figured out in Lessons 2 through 12 to explain (1) why some storms produce really big hail and others don't and (2) what causes a hurricane to form and grow.

Lesson Set 3: *What causes large-scale precipitation events and how can we predict them?*

Lesson 14
Students observe a video and maps from a weather forecast for a severe winter storm and argue for what ideas from lessons 2 through 13 can be used to explain this phenomena.

Lessons 15-17
Students analyze weather data maps and develop a model for how fronts form and why they can cause precipitation.

Lesson 18
Students apply what they figured out in Lessons 14 through 17 to argue for their ideas about why three other storm systems would produce certain predicted precipitation patterns in the near future.

Lesson Set 4: *Why do some places get more precipitation than others over time?*

Lessons 19-20
Students observe visualizations of annual precipitation around the globe and read about prevailing winds and ocean currents.

Lesson 21
Students analyze climate and elevation data and develop a model for how elevation and prevailing winds affect yearly precipitation amounts in a region.

Lesson 22
Students apply what they figured out over the course of the unit to explain the location of rainforests.

Unit Investigations and Tasks

Throughout the unit, students will do the following:

- Explore hailstorm videos from different locations and seasons, noting hail size, temperature, and weather conditions.
- Generate questions about how hail can form on warm days, how clouds form, and why some storms produce heavy precipitation.
- Analyze weather data and atmospheric temperature profiles related to hail events.
- Investigate how sunlight heats different surfaces and how that affects air temperature and cloud formation.
- Use models, simulations, and labs to explore phase changes of water and how molecules change state under varying conditions.

Unit Investigations and Tasks (continued)

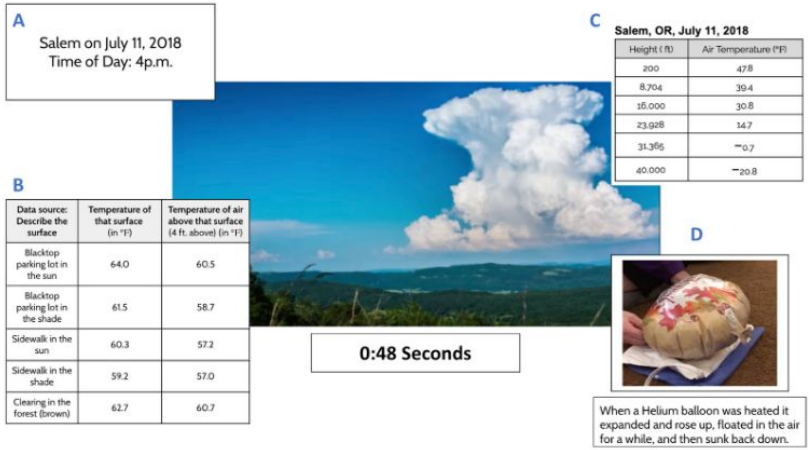
Throughout the unit, students will do the following:

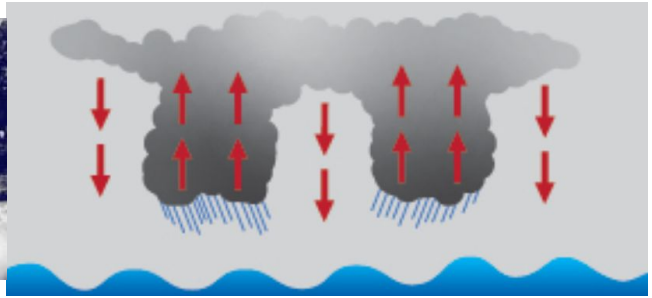
- Investigate air movement caused by heating and cooling.
- Examine a winter storm weather report showing Midwest snow and ice moving toward the Northeast.
- Analyze maps, transcripts, and videos to explore storm movement and forecast predictions.
- Track weather changes across the U.S. over several days for multiple storms.
- Investigate interactions of air masses, prevailing winds, ocean proximity, ocean currents, and elevation on precipitation patterns.
- Apply understanding to explain why South America has both tropical and temperate rainforests near some of the driest regions on Earth.

Assessment Highlights

Mid-Unit Assessment:
[Lesson 6 Explaining the Movement of Air in a Hailstorm Cloud]

Mid-Unit Assessment:
[Lesson 13 Hurricane Model Assessment]

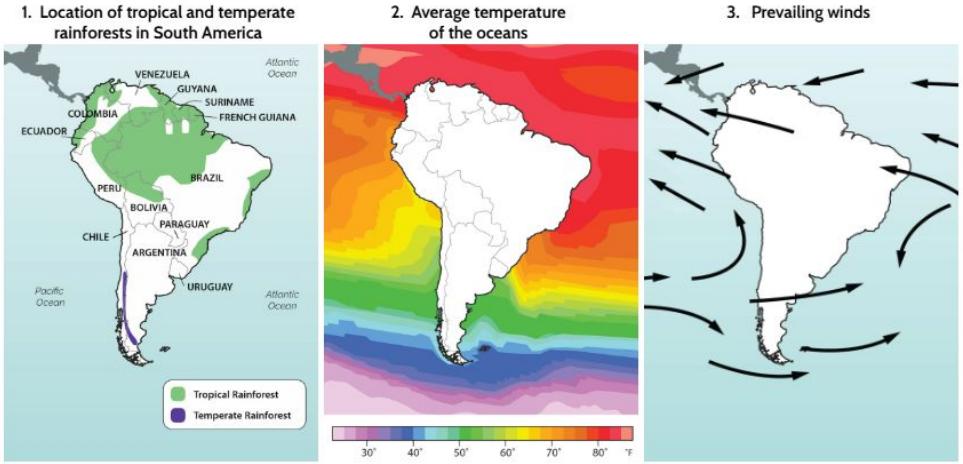


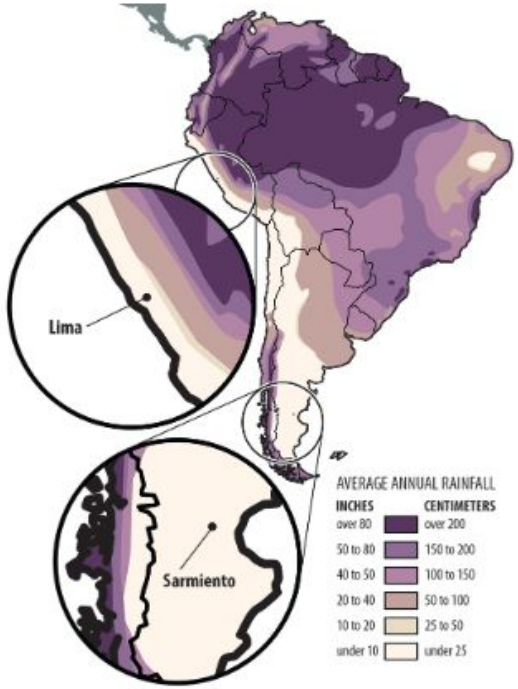


Assessment Highlights

Final Assessment:

[Lesson 22 Rainforest Climate Assessment]





Grade 6 Science:

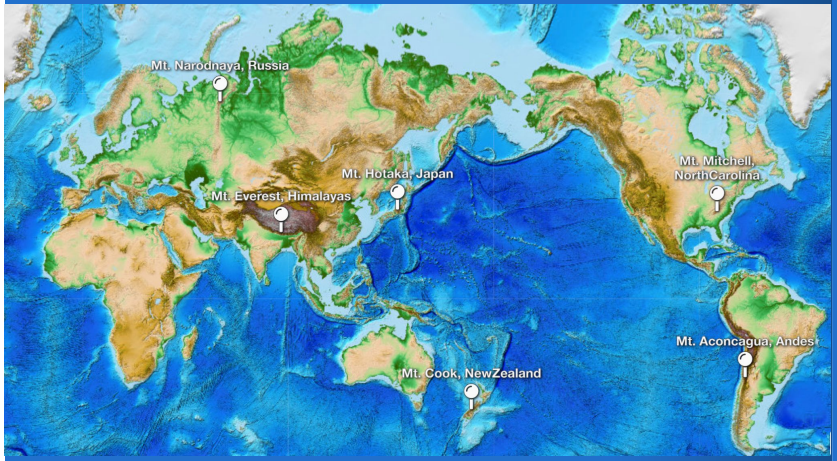
Unit 4: Plate Tectonics & Rock Cycling

Anchoring Phenomenon

Students read about how Mt. Everest is getting taller and moving to the northeast over time. They look at data of four other mountains and find out that they are also changing in elevation, with some shrinking. They model, at a scale larger than visible, what they think causes a mountain to change in elevation.

Anchoring Phenomenon

Students then brainstorm related phenomena where land near them has changed over time. This leads them to a broad set of questions that they use to form their Driving Question Board (DQB). They brainstorm possible investigations and additional data sources that could help answer their questions.



Learning Sequence

Driving question: What causes Earth's surface to change?

Lesson Set 1: *What causes mountains to grow and move?*

Lesson 1

Students read an article about scientists discovering that Mt. Everest has increased in elevation. Then they analyze data about different mountains around the world and find others are also growing and moving.

Lessons 2-9

Students investigate what could cause a mountain to form by figuring out more about Earth's surface and what is below the surface.

Lesson Set 2: *What can cause other changes to mountain elevation and location?*

Lessons 10-12

Students figure out where continents could have been and what mountains looked like in the past.

Lessons 13-14

Students investigate erosion rates and figure out that the elevation of different parts of the Earth is affected by both erosion and uplift rates. When erosion rates are higher than uplift rates, mountains can shrink. Students apply what they have figured out about how Earth's surface changes to explain how a fossil can be found exposed at the top of Mt. Everest.

Unit Investigations and Tasks

Throughout the unit, students will do the following:

- develop a model of Earth that connects movement in the mantle with movement of plates at Earth's surface and determine causal and correlational relationships between plate movement, earthquakes, volcanoes, erosion, and magma movement along with their related energy sources.
- develop a model to show how plates collide or spread apart from one another over long periods of time, forming the different landforms we see.
- analyze multiple sources of data and information (e.g., large data sets on maps, cross-section graphs, text, tables, and labs) to construct models and explanations for processes that build up and wear down Earth's surface over different timescales.
- explain how processes above the surface and below the surface work together to cause the changes seen at and below the surface.

Assessment Highlights

Final Assessment:
Lesson 14 Fossil Assessment

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. i.

AGENDA REPORTING FORM

Agenda Topic: SHS AP Human Geography– Textbook Adoption REPLACEMENT- First Reading.

Summary of Issue: SHS AP Human Geography– Textbook Adoption REPLACEMENT- First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS AP Human Geography– Textbook Adoption REPLACEMENT– to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Southington Public Schools
Southington, CT

TEXT BOOK ADOPTION FORM – PART A

Date: 08/07/25

1. Curriculum Committee or department submitting change: Social Studies Department (High School)

2. Grade levels and high school course(s) in which text will be used: AP Human Geography - gr. 10, 11, 12

3. Proposed Text

   a. *Title* — Human Geography for the AP Course (2nd Ed) - eText & platform
   b. *Author(s) full name(s)* — Barbara Hildebrant; Seth Dixon; Kenneth Keller; Max Lu; Roderick P. Neumann
   c. *Publisher (name and location)* — BFW Publishing Group
   d. *Copyright Date* — 2025

   ReviewLink: Human Geography for the AP® Course, 2nd Edition | BFW Publishers

4. Cost of recommended text: $161/year for 1 subscription

5. Amount Budgeted: $11,268 (6 year use)

6. Number of student copies to be purchased: 70/year

7. This text is (check one): **X** *A replacement for existing text* ☐ *A new text for new or revised course*

8. Rationale for selection of this text (if replacement for current text, be sure to indicate why the text needs to be replaced and the advantages of the proposed new text):

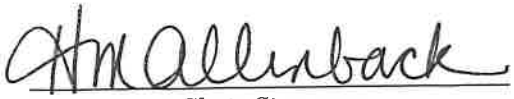
The current AP Human Geography textbook needs to be replaced for several important reasons. Most notably, recent updates to the AP Human Geography course outline are not adequately addressed in the existing text, leaving it misaligned with the current curriculum and instructional goals.

Additionally, the textbook's academic tone and complexity are more appropriate for college-level students. While this was manageable when the course was limited to Juniors and Seniors, it has become a barrier now that the majority of students enrolled are Sophomores. As a result, many students struggle to fully engage with and comprehend the material.

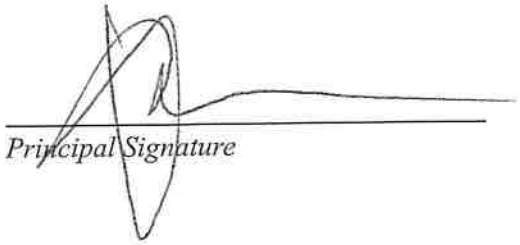
The proposed replacement is specifically designed to be more accessible to underclassmen, who now represent the bulk of AP Human Geography students nationwide. Developed with direct input from Professor Seth Dixon—former AP Human Geography Chief Reader—the new text is closely aligned with the revised course framework and exam expectations. The text is provided through BFW's Achieve platform, offering a more effective learning experience than the current textbook's platform.

Department or Committee Members: Heather Allenback (Dept Leader) & Nicholas Vargas (Teacher)

Approvals:



Department Chair Signature



Principal Signature

6161 (2)

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. j.

AGENDA REPORTING FORM

Agenda Topic: SHS AP Government and Politics– Textbook Adoption REPLACEMENT- First Reading.

Summary of Issue: SHS AP Government and Politics– Textbook Adoption REPLACEMENT - First Reading.

Background:

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS AP Government and Politics– Textbook Adoption REPLACEMENT – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Southington Public Schools
Southington, CT

TEXT BOOK ADOPTION FORM – PART A

Date: 08/07/25

1. Curriculum Committee or department submitting change: Social Studies Department (High School)

2. Grade levels and high school course(s) in which text will be used: AP Govt & Politics - gr. 11, 12

3. Proposed Text

   a. *Title* — American Government: Stories of a Nation (for the AP Course) - eText & platform
   b. *Author(s) full name(s)* — Scott Abernathy; Karen Waples
   c. *Publisher (name and location)* — BFW Publishing Group
   d. *Copyright Date* — 2025

   ReviewLink: American Government: Stories of a Nation, 2nd Edition | BFW Publishers

4. Cost of recommended text: $155/year for 1 subscription

5. Amount Budgeted: $11, 264 (6 year use)

6. Number of student copies to be purchased: 75/year

7. This text is (check one): **X** *A replacement for existing text* ☐ *A new text for new or revised course*

8. Rationale for selection of this text (if replacement for current text, be sure to indicate why the text needs to be replaced and the advantages of the proposed new text):

It is essential that academic resources stay current to the times in order to ensure that students have access to up-to-date course concepts and skills. Specific to AP United States Government and Politics, current applications of course concepts are constantly evolving and as such the materials that we provide our students must do the same. While it is unrealistic to procure a new publication each school year, it must be the practice to update materials periodically, especially when current contracts with publishers allow. At that time, it is also prudent to evaluate the materials being offered by different publishers and to adjust accordingly.
BFW Publishers is currently offering their 2nd edition of American Government: Stories of a Nation. This publication and its accompanying digital platform directly aligns itself with the AP curriculum including all required materials and supplemental resources that are essential for students to be successful in a rigorous and demanding course. Additionally, the book and digital platform provide tools that assist the teacher in developing new and innovative lessons akin to professional development training as well as provide students with accessibility options. Procuring these resources will enhance the student and teacher alike.

Department or Committee Members: Heather Allenback (Dept Leader) & Evan Tuttle (teacher)

Approvals:

H Allenback

Department Chair Signature

Principal Signature

6161 (2)

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. k.

AGENDA REPORTING FORM

Agenda Topic: SHS Advanced Pottery – New Course Proposal- First Reading.

Summary of Issue: SHS Advanced Pottery – New Course Proposal- First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Advanced Pottery – New Course Proposal– to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Southington Public Schools
Southington, Connecticut

School: **Southington High School**

Department: **Art**

Please check appropriate item:

New Course: **X**

Revised Course: ☐

Course Title: **Advanced Pottery**

1) Proposed Change – Please give a brief description of the proposed new course or revision to the existing course.

New Course Description:

- ½ year course at the accelerated level
- ½ credit
- Course will be offered in grades 10, 11 & 12
- Major course components: Advanced Hand Building Techniques, Extensive Wheel Throwing, Slip Casting, Slump Molds and Glazing & Decorative Techniques
- Maximum of 22 students per section
- Staffing: 1 Existing Certified Art Teacher

Goal:

To offer a pottery curriculum that continues to build on the skills students gain in the introductory Pottery course. The primary focus is to give students the opportunity to learn advanced pottery techniques and give them an avenue to pursue a concentrated period of artistic creation of three-dimensional forms with clay.

Advanced Hand Building Techniques

In this course component, students will review the core hand building techniques of slab, pinch and coil. From there, they will be introduced to variations of each of those techniques to expand their technical skills. Students will also be introduced to hollowing out solid construction and combining all techniques to support large construction . Lessons will encourage students to develop their creative expression through an extended body of work.

Slip Casting & Slump Molds

In this course component students will be introduced to creating clay forms with molds. One method is slip casting. Students will learn how to prepare slip and make their own single piece casting molds. Students will create slip casted pottery forms using their own single molds as well as more complex forms using two piece casting molds. In addition to slip casting molds students will also be introduced to slump and hump molding techniques using forms they have created or found as their base molds. With each new clay technique introduced students will continue to expand their body of work.

Extensive Wheel Throwing

In this course component, students will review the core wheel throwing skills of centering, opening, pulling up,

shaping and trimming. Then they will be introduced to additional techniques such as altered forms, enclosed forms and stacking forms. These lessons will encourage students to create larger vessels and sculptures while continuing to develop their artistic style and building onto their body of work.

Glazing & Decorative Techniques
In this course component, students will be introduced to creating their own stamps for pattern making, use slip for decorative texture, create color slip for enhancing their pottery designs, learn sgraffito and resist techniques. In addition students will research varied glazing and non-glazing decorative techniques and incorporate both glaze and non-glaze techniques that they have researched and experimented with into their body of work.

2) Rationale – What is the purpose of the proposed new course or course change? To what extent will it benefit the students?

Background Information:
Currently and consistently we have a high number of students interested in and taking our first level Pottery course. The overall enrollment for Pottery & Crafts as a full year course in the 2023-2024 school year was 75 in 3 sections. Currently, this school year and as a half year course, we have 103 students in 5 sections. It is a little hard to compare data based on the change from a half year course to a full year however, the ongoing projected numbers for the next school year continues to be consistent with trends in how the numbers fluctuate from year to year.

The Need:
This new course would provide another option for students with an interest and/or a strong background in 3 dimensional design artworks. A great option. The course content/curriculum, materials, timing, teaching and learning would all focus on continued and advanced exploration in functional and sculptural clay building techniques, finishes and methods. **Students have repeatedly expressed a desire for continuation in this great medium of study. Additionally, this new course will create a more sound and complete path toward entering the AP Studio Art class and taking the AP Studio Art 3D Design exam.**

Reinforcement:
As per the 6 C's Rubrics and our "Vision of a Graduate", this new course heavily addresses teaching and learning to reinforce that students will be "college or career ready and prepared for life beyond by mastering the knowledge and demonstrating the skills to communicate effectively, think creatively and critically, and contribute to the global community." This will be clearly evident through full class and small group collaborative models of creating projects in addition to individual exploration. Students will have to collaborate in order to complete certain projects successfully; show leadership & initiative, cooperate, be flexible, be responsible and productive. Effective communication between all students will be highly desired. Having conversation and engaging in artistic criticism that crosses boundaries of understanding from one student to another will be practiced daily. Students will be expected to ask questions of each other, listen, and share ideas. As always, creativity is our hallmark. Students will individually, with a partner and as a class, generate ideas, explore, carry out projects and refine their work. Methods of critical thinking will be encouraged and practiced. Having the ability to seek out clarity, interpret, analyze, reason and resolve creative problems combined with understanding how one interacts with artwork will be a great challenge to explore.

3) Target Population – Which group of students will be directly affected (grade level, academic level)?

All students who have successfully completed the general and first level Pottery course with a 70 grade average or above. These students will be in the 10th-12th grades.

PROPOSED COURSE/PROGRAM CHANGE FORM

4) Evaluation – How do you plan to assess the implementation of the proposed new course or the course change?

Evaluating the implementation of this course will be a constant reflective process with regular editing and updating. The population of students, their specific artistic needs and levels will be ever changing and need to be adapted to. Flexibility will be inevitable. Curriculum and instruction in this course will be fluid based on the unique needs of the learners.

5) Cost – What are the anticipated costs for staff, textbooks, materials, other?

Staffing - This course will be carried out with the existing art teachers.

Textbooks are not needed for this new course.

Materials will continue to be fulfilled within our current and future department budget.

Other/Technology Pottery Wheels

	YEAR		
	I	**II**	**III**
Staff	$	$	$
Textbooks	$0.0	$0.0	$0.0
Materials	$0.0	$0.0	$0.0
Other (Addition of a pottery wheel each of the first 3 years)	$1800.00	$1800.00	$1800.00
TOTAL	$1800.00	$1800.00	$1800.00

Comments:

It is necessary to replace and increase the number of pottery wheels for both the current Pottery course and the proposed new Advanced Pottery course. They have not been replaced or upgraded in at least 24 years. Likely, the current pottery wheels were obtained when the Art wing was added to Southington High School in 1988. We currently have 4 fully working pottery wheels that are rotated through a class size of up to 22 students. The course(s) could run without this additional equipment however, the quality of course content would be affected.

Principal: Approved ☑ Denied ☐

Signature

Advanced Pottery

SHS - Art Department
Half Year Course
Prerequisite Pottery

Unit 1 : Advanced Hand Building Techniques

Unit Overview:

- Review the core hand building techniques of slab, pinch and coil
- Introduction to sculpting and Kurinuki (the hollowing out of a solid clay form)
- Student will begin to formulate an artist statement to guide their creation of pottery work for the course.
- Students will combine all techniques to create a large complex functional or sculptural clay structure that is guided by their artist statement.

Essential Question Highlights:

- How do artists and designers learn from trial and error?
- What role does persistence play in revising, refining, and developing work?
- How does collaboratively reflecting on a work help us experience it more completely?

Unit 1 : Performance Task

- **Goal:** Utilize the pinch, slab, coil & hollowed forms hand techniques to create a functional or sculptural artwork.
- **Role:** Creator/Artist
- **Audience:** Teachers, Peers, Family and School Community
- **Situation:** Student is creating a large body of 3-D work using mediums common to pottery. One of the artwork pieces in the final portfolio needs to be a student directed project that utilizes the hand building techniques of pinch, slab, coil & hollowed forms
- **Product/Performance/Purpose:** Sculptural or functional clay form
- **Standards and Criteria for Success:** The art student will utilize pinch, slab, coil and Kurinuki techniques to construct a clay creation for the purpose of sculptural display or functional use. The criteria for success will be based on creativity of concept, use of material, skill in executing techniques, functionality if applicable, the ability to reflect on and then refine the work in progress and to reflect on and display work at completion.

Unit 2 : Slip Casting & Slump Molds

Unit Overview:

- Introduction to creating clay forms using slip casting molds
  - Students will make their own single piece casting molds.
  - Students will create slip casted pottery forms using their own single molds.
- Introduction to creating forms using slump and hump molds
  - Students will create forms or use found objects as their base molds.
  - Students will use their molds to create a functional or sculptural clay structure.
- Students will use the cast and/or slump mold techniques alone or in conjunction with other techniques to create clay works that continue to add to their body of work based on their living artist statement.

Essential Question Highlights:

- How do artists and designers learn from trial and error?
- How do life experiences influence the way you relate to art?
- How does one determine criteria to evaluate a work of art?

Unit 2 : Performance Task

- **Goal:** Utilize slip casting, slump or hump molds to create a functional or sculptural artwork as part of a larger body of work.
- **Role:** Creator/Artist
- **Audience:** Teachers, Peers, Family and School Community
- **Situation:** Student is creating a large body of 3-D work using mediums common to pottery. One of the artwork pieces in final portfolio needs to be a student directed clay project created by utilizing the techniques of slip casting and/or slump or hump mold method.
- **Product/Performance/Purpose:** Sculptural or functional clay form
- **Standards and Criteria for Success:** The art student will utilize slip casting, slump or hump mold techniques to construct a clay creation for the purpose of sculptural display or functional use. The criteria for success will be based on creativity of concept, use of material, skill in executing techniques, functionality if applicable, the ability to reflect on and then refine the work in progress and to reflect on and display work at completion.

Unit 3 : Extensive Wheel Throwing

Unit Overview:

- Review the core wheel throwing skills of centering , opening , pulling up, shaping and trimming
    - Students will advance their skills by creating multiple forms for process not product.
- Introduction to the additional wheel throwing techniques of altered forms, enclosed forms and stacking forms.
    - Student will combine multiple thrown vessels to create a complex functional or sculptural clay structure that is tied to their living artist statement.

Essential Question Highlights:

- How do artists and designers learn from trial and error?
- What factors prevent or encourage people to take creative risks?
- How does knowing the contexts histories, and traditions of art forms help us create works of art and design?

Unit 3 : Performance Task

- **Goal:** Utilize wheel throwing techniques of altered forms, enclosed forms and stacking forms to create a functional or sculptural artwork.
- **Role:** Creator/Artist
- **Audience:** Teachers, Peers, Family and School Community
- **Situation:** Student is creating a large body of 3-D work using mediums common to pottery. One of the pieces in the final portfolio needs to be a student directed artwork created completely or partial through the use of the mechanical tool of a pottery wheel .
- **Product/Performance/Purpose:** Sculptural or functional clay form
- **Standards and Criteria for Success:** The art student will utilize the pottery wheel to construct a clay creation for the purpose of sculptural display or functional use. The criteria for success will be based on creativity of concept, use of material, skill in executing techniques, functionality if applicable, the ability to reflect on and then refine the work in progress and to reflect on and display work at completion.

Unit 4 : Glazing and Decorative Techniques

Unit Overview:

- Review of the underglaze and gloss glaze traditional uses
    - Introduction to sgraffito (glazing and carving) and resist techniques that are done with the traditional underglaze and gloss glazes.
- Introduction to creating stamps and colored slip to be used for the creation of decorative texture on the finished pottery form.
- Students will research varied glazing and non-glazing decorative techniques and incorporate both glaze and non-glaze techniques that they have researched and experimented with into their body of work.

Essential Question Highlights:

- How do artists and designers learn from trial and error?
- How does knowing and using visual art vocabularies help us understand and interpret works of art?
- What methods and processes are considered when preparing artwork for presentation or preservation?

Unit 4 : Performance Task

- **Goal:** Utilize a variety of glazing techniques that could include stamping, colored slip, sgraffito, resist or informed experimentation to add functional and aesthetic quality to the final clay forms.
- **Role:** Creator/Artist
- **Audience:** Teachers, Peers, Family and School Community
- **Situation:** Student is creating a large body of 3-D work using mediums common to pottery. All of the artwork pieces in final portfolio need to be completed with a glazing technique and multiple techniques need to present when viewing the final body of work as a whole.
- **Product/Performance/Purpose:** Sculptural or functional clay form sealed and visually altered through the use of decorative technique.
- **Standards and Criteria for Success:** The art student will utilize glazing and decorative techniques for the purpose of adding interest to a sculptural or functional clay form. The criteria for success will be based on creativity of concept, use of material, skill in executing techniques, functionality if applicable, the ability to reflect on and then refine the work in progress and to reflect on and display work at completion.

Advanced Pottery

SHS - Art Department
Half Year Course
Prerequisite Pottery

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. l.

AGENDA REPORTING FORM

Agenda Topic: SHS Emergency Medical Technician– New Course Proposal- First Reading.

Summary of Issue: SHS Emergency Medical Technician– New Course Proposal- First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Emergency Medical Technician– New Course Proposal– to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Course & Instructor Information

Training Center Supervisor

Justin Fortin, M.Ed., NRP, EMS-I
Education & Training Supervisor
Hunter's Ambulance Service
Justin.Fortin@hhchealth.org
203 514 5133 Office
203 886 8652 Cellphone

Associate Instructors

Emily Derynoski, BS, NREMT, EMS-I
Emily.derynoski@hhchealth.org
203 514 5133

Christopher Ryan, NREMT, EMS-I
Christopher.Ryan@hhchealth.org
203 514 5158

Christopher Beaulieu, NREMT, EMS-I
Christopher.beaulieu@hhchealth.org
203 514 5146

Tom Levy, EMT-P, EMS-I
Thomas.levy@hhchealth.org
203 514 5133

Ron Talit, EMT-P, EMS-I
Ron.talit@hhchealth.org

Lisa Clark, NREMT, EMS-I
Lisa.Clark2@hhchealth.org
203 514 5181

Craig Sassu, NRP, EMS-I
craig.suassu@hhchealth.org

Course Description and Purpose

This course prepares students for certification as an emergency medical technician (EMT), utilizing basic knowledge and skills necessary to stabilize and safely transport patients ranging from non-emergency and routine medical transports to life threatening emergencies. Students will learn the knowledge and skills necessary to provide out of hospital emergency medical care and transportation for critical and emergent patients who access the emergency medical services (EMS) system. Various ways EMTs function as part of a comprehensive EMS response system, under medical oversight, will be covered. Students will learn to perform interventions with the basic equipment typically found in an ambulance. The critical link between the scene of an emergency and the health care system will be emphasized.

The EMT program is based upon the U.S. Department of Transportation curriculum and will prepare the student to function in the following areas:

- Controlling life threatening situations, including maintaining an open airway, providing artificial ventilation, operating an AED, controlling severe bleeding, administering certain medications, and treating for shock.
- Stabilizing non-life-threatening situations, including dressing and bandaging wounds, splinting injured extremities, delivering, and caring for infants, and dealing with psychological stress of dealing with patients, their family members, neighbors, and colleagues.
- Using non-medical skills, such as driving, maintaining supplies and equipment, using good communication skills, keeping good records, knowing proper extrication techniques, and coping with related legal issues.

THE EMT CODE OF ETHICS

Professional status as an Emergency Medical Technician and Emergency Medical Technician-Paramedic is maintained and enriched by the willingness of the individual practitioner to accept and fulfill obligations to society, and other medical professionals, and the profession of Emergency Medical Technician, I solely pledge myself to the following code of professional ethics:

A fundamental responsibility of the Emergency Medical Technician is to conserve life, to alleviate suffering, to promote health, to do no harm, and to encourage the quality and equal availability of emergency medical care.

The Emergency Medical Technician provides services based on human need, with respect for human dignity, unrestricted by consideration of nationality, race creed, color or status.

The Emergency Medical Technician does not use professional knowledge in any enterprise detrimental to the public wellbeing.

The Emergency Medical Technician respects and holds in confidence all information of a confidential nature obtained in the course of professional work, unless required by law to divulge such information.

The Emergency Medical Technician, as a citizen, understands and upholds the law and performs the duties of citizenship as a professional.

The Emergency Medical Technician has the never-ending responsibility to work with concerned citizens and other health care professionals in promoting a high standard of emergency medical care to all people.

The Emergency Medical Technician shall maintain professional competence and demonstrate concern for the competence of other members of the Emergency Medical Services health care team.

An Emergency Medical Technician assumes responsibility for individual professional actions and judgment both in dependent and independent emergency functions and knows and upholds the laws which affect the practice of the Emergency Medical Technician.

An Emergency Technician has the responsibility to be aware of and participate in matters of legislation affecting the Emergency Medical Technician and the Emergency Medical Services System.

The Emergency Medical Technician adheres to standards of personal ethics which reflect credit upon the profession.

Emergency Medical Technicians, or groups of Emergency Medical Technicians, who advertise professional services, do so in conformity with the dignity of the profession.

The Emergency Medical Technician has an obligation to protect the public by not delegating to a person less qualified any service which requires the professional competence of an Emergency Technician.

The Emergency Medical Technician will work harmoniously with and sustain confidence in Emergency Medical Technician Associates, the nurse, the physician and other members of the Emergency Medical Service Health Care Team.

The Emergency Medical Technician refuses to participate in unethical procedures and assumes the responsibility to expose incompetence or unethical conduct of others to the appropriate authority in a proper and professional manner.

The National Association of Emergency Medical Technicians

Course Communications
Course information such as emergent schedule changes and emergent cancellations will be done through email and/or phone.

Class Hours:

Ride Time and Clinical Time will vary according to availability of faculty

Required Course Material (Provided as part of tuition)

Jones and Bartlett [ISBN: 9781284243796]
Emergency Care and Transportation of the Sick and Injured – 12th Edition
ADVANTAGE ACCESS – for online access to study tools and homework
American Academy of Orthopedic Surgeons (AAOS)

American Heart Association [ISBN: 9781616697686]
BLS Provider Manual
American Heart Association

Course Activities

Course Learning Activities & Assessments

You will have multiple opportunities to practice and demonstrate your progress toward the above student learning outcomes in this course. These include but are not limited to: group projects, at home assignments, reading and taking notes, short clips to explain processes, presentations from experts in the field etc.

Student Learning Objectives/Outcomes

Learning Objectives/Outcomes
1. Apply scientific knowledge in providing prehospital and emergency medical care
2. Use effective communication and interpersonal skills with patients and other health care workers
3. Operate within the roles of an entry level provider of care and contributor to the EMT profession
4. Demonstrate and foster high standards of Prehospital and Emergency Medical practice in skill performance and patient advocacy
5. Provide competent and safe care in a variety of settings to a group of patients with diverse needs across the life span by demonstrating knowledgeable decision making and judgment based on critical thinking, clinical competence, accountability and collaboration with the patient and health care team
6. To promote the personal and professional growth, health and success of each student
7. To promote the concept of lifelong learning, including the pursuit of advanced degrees and advanced practice in the health field
8. To prepare graduates who are eligible to seek licensure as EMTs and that meet the expectations of the EMS Community

Emergency Department Observation

Each student (18 years or older) is required to complete 8 hours of clinical observation time at the Hospital of Central Connecticut (HOCC) or Midstate Medical Center (MMC).

Students will be paired with an RN for their shift and the student is there to shadow the RN and take notes on each patient they encounter.

All students need to submit documentation on patients prior to the end of the course. If the student is unable to have patient encounters during their observation time, they may opt for a second shift in the ED or they will need to make up the remaining patient contacts during in class scenarios.

Uniform

The required uniform for ED observation is business/business casual attire. For example: Khakis, polo shirt, and sneakers.

EMS Observation Time

Each student is required to complete 8 hours of clinical observation time Hunter's Ambulance.

Students will be paired with an EMS Crew for their shift and the student is there to shadow and take notes on each patient they encounter.

Uniform

The required uniform for EMS observation is business/business casual attire. For example: Khakis, polo shirt, and sneakers.

**The decision of the Course Coordinator, Instructor, Filed Training Officer or Hospital Staff as to the appropriateness of the employees' dress and that decision is final. Employees will be required to remove or cover any offensive clothing and may be dismissed from that class or sent home from their clinical rotation. Employees who violate the class dress code must meet with the Course Coordinator AND Clinical Coordinator before they are allowed to return to class. These subsequent absences will be considered unexcused.*

Affective Domain

The affective domain is one of the three domains in Bloom's Taxonomy. It involves feelings, attitudes, and emotions. It includes the ways in which people deal with external and internal phenomenon emotionally, such as values, enthusiasms, and motivations.

During the first night of class, all students will work together to create an affective domain for the class. This will include several aspects of their behavior while in class and at clinical observation time. (Ex. Professionalism, responsibility, leadership)

It is expected that all students will maintain a professional affect while in class, at clinicals or on ride time. Any student who displays a negative affective domain will receive disciplinary action up to removal from the course if the circumstance warrants.

Final Grades

Assignment/Assessment	Percentage of Grade
Homework/Assignments	20 %
Quizzes	20 %
Midterm	20 %
Final Practical Exams	20 %
Final Written Exam	20 %
Total	**100%**

This class requires a minimum of 70% to be eligible to take the NREMT exams to become a certified EMT. Please follow university guidelines for grading the class for credits.

Final Written Exam

The final written exam is a 100-question exam that is cumulative from all chapters of the book. The student must earn a minimum of a 70 on this test to pass the class.

If the student does not pass the test with a 70 or higher, they will get one chance to retake the test. The retest will be 100 different multiple-choice questions and the student must obtain a minimum of a 70 to pass this test.

If the student does not pass the retest they will be dismissed from the course.

Final Practical Exams

The final practical exams will be set up similar to the NREMT Practical Exams. Students will go through each of 5 stations:

- Patient Assessment/Management – Medical
- Patient Assessment/Management – Trauma
- BVM Ventilation of an Apneic Adult Patient
- Cardiac Arrest Management/AED
- Random Skill Station (Long bone immobilization/Joint Immobilization/Bleeding control)

Each student will need to complete each station without getting any critical fails. The minimum passing score is a 70 for all stations. A critical fail will result in a 0 and the student will have to retest.

Each student may retest until a passing grade is achieved; however, all grades will be averaged for the final grade on that station.

NREMT/CT Certification Exam

To obtain your NREMT certification and CT EMT certification you will need to complete 2 separate exams. These exams include a computer based cognitive exam and a psychomotor exam.

Cognitive Exam

The cognitive exam will be taken once the student has successfully completed the EMT program. The written exam can be taken anywhere in the United States at a Pearson Vue testing center.

Psychomotor Exam

The psychomotor exam will be taken once the student has successfully completed the EMT program. The student will need to take this exam in Connecticut at an accredited testing center.

Retesting

In the event a student fails their certification exams, they will need to go through the retesting process. This includes repaying to take each exam.

Student Expectations

Expectations for Attendance and Participation

Tardy is defined as arriving more than 15 minutes late to a class, please arrive to class on time.

Any student arriving more than 30 minutes late to class will be marked absent. (An absent result in a 0 for a grade for that day)

2 tardies = 1 absence

If you are absent more than 4 classes, you will meet with the lead instructor and/or course coordinator and may be placed on academic probation or dropped from the program.

If you are absent from class, all due dates are still to be met on time. You can complete coursework online and so this means that coursework should not be late regardless of attendance in class.

If you encounter a problem with a deadline or wish to discuss assignments, please reach out to the lead instructor so a determination can be made on extension.

Assignments

It is expected that all assignments are submitted on time.

Homework is due before the next class. Example:

> We go over Chapter 1 on Monday; Chapter 1 Homework is due on Wednesday at 9:00AM.

Late submissions will be accepted following the guidelines below:

- Submission within 24 hours of the original deadline will result in 10 points off the assignment.
- Submission 24-48 hours late will receive 25 points off the assignment.
- Any assignment submitted later than 48 hours will not receive credit

FEMA

Students are required by Federal and State mandate to complete the FEMA and National Incident Management Training Programs as prescribed by Presidential and Gubernatorial Directives.

The following courses are to be completed and submitted prior to the due date:
IS-100
IS-200
IS700
IS800
IS-5a

All required courses must be completed, and the proof of completion (certificates) placed in student file.
Failure to complete these courses by the due date on schedule will result in the inability to graduate from the program.

Hartford HealthCare
Emergency Medical Services Network

HUNTER'S AMBULANCE

Emergency Medical Technician
Hunter's Ambulance Syllabus
Southington High School

Day	Date	Subject	Homework (Due before the start of the next class)
1		Meet and Greet EMS Orientation & Syllabus JBLearning Login CT Application NREMT Application	Read and Take Notes: Ch. 1
2		Chapter 1: EMS Systems	Chapter 1 Homework Read and Take Notes: Ch. 9
3		Chapter 9: A Team Approach to Healthcare	Chapter 9 Homework Read and Take Notes: Ch. 2
4		Chapter 2: Workforce Safety & Wellness Bloodborne Pathogens Airborne Pathogens	
5		Chapter 2: Workforce Safety & Wellness Personal Protective Equipment Lab	Chapter 2 Homework Read and Take Notes: Ch. 3
6		Chapter 3: Medical, Legal and Ethical Issues	Chapter 3 Homework Read and Take Notes: Ch. 4
7		Chapter 4: Communications and Documentation	Chapter 4 Homework Study for Quiz 1
8		Quiz 1: Chapters 1, 2, 3, 4 & 9 Communications Lab Patient Care Report Lab	Read and Take Notes: Ch. 5
9		Chapter 5: Medical Terminology	Chapter 5 Homework Read and Take Notes: Ch. 6
10		Chapter 6: The Human Body	
11		Chapter 6: The Human Body	Chapter 6 Homework Read and Take Notes: Ch. 10
12		Chapter 10: Patient Assessment	
13		Chapter 10: Patient Assessment	Chapter 10 Homework Read and Take Notes: Ch. 15
14		Chapter 15: Medical Overview	Chapter 15 Homework Read and Take Notes: Ch. 25
15		Chapter 25: Trauma Overview	Chapter 25 Homework Study for Quiz 2
16		Quiz 2: Chapters 5, 6, 10, 15 & 25 Patient Assessment Lab	Read and Take Notes: Ch. 38
17		Chapter 38: Transport Operations	Chapter 38 Homework Read and Take Notes: Ch. 14 Review BLS CPR Book
18		American Heart Association BLS Provider CPR	
19		American Heart Association BLS Provider CPR	Chapter 14 Homework

Hartford HealthCare
Emergency Medical Services Network

HUNTER'S AMBULANCE

Emergency Medical Technician
Hunter's Ambulance Syllabus
Southington High School

		CPR Test	Read and Take Notes: Ch. 12
Begin Field Internship (Ride Time) and Clinical Experience (ER Time)			
20		Chapter 12: Principles of Pharmacology	Chapter 12 Homework
21		BLS Medication Review Pharmacology Lab	Read and Take Notes: Ch. 11
22		Chapter 11: Airway Management Airway Management Lab	
23		Chapter 11: Airway Management Airway Management Lab	Chapter 11 Homework Read and Take Notes: Ch. 16
24		Chapter 16: Respiratory Emergencies	
25		Chapter 16: Respiratory Emergencies	Chapter 16 Homework Read and Take Notes: Ch. 17 Study for Quiz 3
26		Quiz 3: Chapters 11, 12, 14, 16 & 38 Chapter 17: Cardiovascular Emergencies	
27		Chapter 17: Cardiovascular Emergencies	Chapter 17 Homework Read and Take Notes: Ch. 18
28		Chapter 18: Neurological Emergencies	
29		Chapter 18: Neurological Emergencies	Chapter 18 Homework Read and Take Notes: Ch 19
30		Chapter 19: Gastrointestinal & Urologic Emergencies	
31		Chapter 19: Gastrointestinal & Urologic Emergencies	Chapter 19 Homework Read and Take Notes: Ch. 20
32		Chapter 20: Endocrine and Hematologic Emergencies	Chapter 20 Homework Read and Take Notes: Ch. 21
33		Chapter 21: Allergy and Anaphylaxis Epinephrine Check and Inject	Chapter 21 Homework Study for Quiz 4
34		Quiz 4: Chapters 17, 18, 19, 20 & 21 Skills Lab	
35		NREMT Skills Lab BVM Ventilations CPR and AED Medical Patient	Read and Take Notes: Ch. 23
36		Chapter 23: Behavioral Health Emergencies	Chapter 23 Homework
37		QPR Suicide Prevention Patient Restraint Lab	Read and Take Notes: Ch. 24
38		Chapter 24: Gynecologic Emergencies	Chapter 24 Homework Read and Take Notes: Ch. 34
39		Chapter 34: Obstetrics and Neonatal Care	
40		Chapter 34: Obstetrics and Neonatal Care L&D Lab	Chapter 34 Homework Read and Take Notes: Ch. 35
Child Abuse Mandated Reporter Assignment Due by class 41			
41		Chapter 35: Pediatric Emergencies	
42		Chapter 35: Pediatric Emergencies	Chapter 35 Homework Read and Take Notes: Ch. 36
Elder Abuse Mandated Reporter Assignment Due by class 43			

Hartford HealthCare
Emergency Medical Services Network

HUNTER'S AMBULANCE

Emergency Medical Technician
Hunter's Ambulance Syllabus
Southington High School

43		Chapter 36: Geriatric Emergencies	
44		Chapter 36: Geriatric Emergencies	Chapter 36 Homework Study for Quiz 5
45		Quiz 5: Chapters 23, 24, 34, 35 & 36 NREMT Skills Lab BVM Ventilations CPR and AED Medical Patient	Read and Take Notes: Ch. 26
46		Chapter 26: Bleeding Stop the Bleed	Chapter 26 Homework Read and Take Notes: Ch. 13
47		Chapter 13: Shock	Chapter 13 Homework Read and Take Notes: Ch. 27
48		Chapter 27: Soft Tissue Injuries	
49		Chapter 27: Soft Tissue Injuries	Chapter 27 Homework Read and Take Notes: Ch. 32
50		Chapter 32: Orthopedic Trauma	Chapter 32 Homework Read and Take Notes: Ch. 28
51		Chapter 28: Face and Neck Injuries	Chapter 28 Homework Study for Quiz 6
52		Quiz 6: Chapters 13, 26, 27, 28 & 32 NREMT Skills Lab Bleeding Control Long Bone Immobilization Joint Immobilization Trauma Patient	Read and Take Notes: Ch. 29
53		Chapter 29: Head and Spine Injuries	Chapter 29 Homework Read and Take Notes: Ch. 30
54		Chapter 30: Chest Injuries	Chapter 30 Homework Read and Take Notes: Ch. 31
55		Chapter 31: Abdominal and Genitourinary Injuries	Chapter 31 Homework Read and Take Notes: Ch. 37
56		Chapter 37: Special Patient Populations	Chapter 37 Homework Read and Take Notes: Ch. 8
57		Chapter 8: Lifting and Moving Patients Lifting and Moving Lab	Chapter 8 Homework Study for Quiz 7
58		Quiz 7: Chapters 8, 29, 30, 31 & 37 Skills Lab	Read and Take Notes: Ch. 22
59		Chapter 22: Toxicology	Chapter 22 Homework Read and Take Notes: Ch. 33
60		Chapter 33: Environmental Emergencies	Chapter 33 Homework Read and Take Notes: Ch. 39
61		Chapter 39: Vehicle Extrication and Special Rescue	Chapter 39 Homework
62		Vehicle Extrication	Read and Take Notes: Ch. 41
All FEMA Assignments Due (5, 100, 200, 700 & 800) by class 63			
63		Chapter 41: Terrorism Response and Disaster Management	Chapter 41 Homework Read and Take Notes: Ch. 40
64		Chapter 40: Incident Management	Chapter 40 Homework

Hartford HealthCare
Emergency Medical Services Network

HUNTER'S AMBULANCE

Emergency Medical Technician
Hunter's Ambulance Syllabus
Southington High School

			Study for Quiz 8
65		Quiz 8: Chapters 22, 33, 39, 40 & 41 Skills Lab	
66		MCI Drill	
All Patient Care Reports and Vital Sign Logs are due by class 67			
67		Skills Lab	
68		Skills Lab	
69		Skills Lab	
70		LEAVE OPEN (Snow Days and Schedule Changes)	
71		LEAVE OPEN (Snow Days and Schedule Changes)	
72		Final Practical Skills Evaluation	
73		Final Practical Skills Evaluation	
74		Final Practical Skills Evaluation	
75		Final Practical Skills Evaluation	
76		Final Practical Skills Evaluation	
77		Final Written Exam	
78		Final Exam Makeups	
79		Final Exam Makeups	
80		Final Exam Makeups	

Southington High School EMT Program
88 min classes

Day	Date	Subject	Homework (Due before the start of the next class)
1		Meet and Greet EMS Orientation & Syllabus JBLearning Login CT Application NREMT Application	Read and Take Notes: Ch. 1
2		Chapter 1: EMS Systems	Chapter 1 Homework Read and Take Notes: Ch. 9
3		Chapter 9: A Team Approach to Healthcare	Chapter 9 Homework Read and Take Notes: Ch. 2
4		Chapter 2: Workforce Safety & Wellness Bloodborne Pathogens Airborne Pathogens	
5		Chapter 2: Workforce Safety & Wellness Personal Protective Equipment Lab	Chapter 2 Homework Read and Take Notes: Ch. 3
6		Chapter 3: Medical, Legal and Ethical Issues	Chapter 3 Homework Read and Take Notes: Ch. 4
7		Chapter 4: Communications and Documentation	Chapter 4 Homework Study for Quiz 1
8		Quiz 1: Chapters 1, 2, 3, 4 & 9 Communications Lab Patient Care Report Lab	Read and Take Notes: Ch. 5
9		Chapter 5: Medical Terminology	Chapter 5 Homework Read and Take Notes: Ch. 6
10		Chapter 6: The Human Body	
11		Chapter 6: The Human Body	Chapter 6 Homework Read and Take Notes: Ch. 10
12		Chapter 10: Patient Assessment	
13		Chapter 10: Patient Assessment	Chapter 10 Homework Read and Take Notes: Ch. 15
14		Chapter 15: Medical Overview	Chapter 15 Homework Read and Take Notes: Ch. 25
15		Chapter 25: Trauma Overview	Chapter 25 Homework Study for Quiz 2
16		Quiz 2: Chapters 5, 6, 10, 15 & 25 Patient Assessment Lab	Read and Take Notes: Ch. 38
17		Chapter 38: Transport Operations	Chapter 38 Homework Read and Take Notes: Ch. 14 Review BLS CPR Book
18		American Heart Association BLS Provider CPR	
19		American Heart Association BLS Provider CPR CPR Test	Chapter 14 Homework Read and Take Notes: Ch. 12
Begin Field Internship (Ride Time) and Clinical Experience (ER Time)			
20		Chapter 12: Principles of Pharmacology	Chapter 12 Homework
21		BLS Medication Review Pharmacology Lab	Read and Take Notes: Ch. 11
22		Chapter 11: Airway Management Airway Management Lab	
23		Chapter 11: Airway Management	Chapter 11 Homework

Southington High School EMT Program
88 min classes

		Airway Management Lab	Read and Take Notes: Ch. 16
24		Chapter 16: Respiratory Emergencies	
25		Chapter 16: Respiratory Emergencies	Chapter 16 Homework Read and Take Notes: Ch. 17 Study for Quiz 3
26		Quiz 3: Chapters 11, 12, 14, 16 & 38 Chapter 17: Cardiovascular Emergencies	
27		Chapter 17: Cardiovascular Emergencies	Chapter 17 Homework Read and Take Notes: Ch. 18
28		Chapter 18: Neurological Emergencies	
29		Chapter 18: Neurological Emergencies	Chapter 18 Homework Read and Take Notes: Ch 19
30		Chapter 19: Gastrointestinal & Urologic Emergencies	
31		Chapter 19: Gastrointestinal & Urologic Emergencies	Chapter 19 Homework Read and Take Notes: Ch. 20
32		Chapter 20: Endocrine and Hematologic Emergencies	Chapter 20 Homework Read and Take Notes: Ch. 21
33		Chapter 21: Allergy and Anaphylaxis Epinephrine Check and Inject	Chapter 21 Homework Study for Quiz 4
34		Quiz 4: Chapters 17, 18, 19, 20 & 21 Skills Lab	
35		NREMT Skills Lab BVM Ventilations CPR and AED Medical Patient	Read and Take Notes: Ch. 23
36		Chapter 23: Behavioral Health Emergencies	Chapter 23 Homework
37		QPR Suicide Prevention Patient Restraint Lab	Read and Take Notes: Ch. 24
38		Chapter 24: Gynecologic Emergencies	Chapter 24 Homework Read and Take Notes: Ch. 34
39		Chapter 34: Obstetrics and Neonatal Care	
40		Chapter 34: Obstetrics and Neonatal Care L&D Lab	Chapter 34 Homework Read and Take Notes: Ch. 35
Child Abuse Mandated Reporter Assignment Due by class 41			
41		Chapter 35: Pediatric Emergencies	
42		Chapter 35: Pediatric Emergencies	Chapter 35 Homework Read and Take Notes: Ch. 36
Elder Abuse Mandated Reporter Assignment Due by class 43			
43		Chapter 36: Geriatric Emergencies	
44		Chapter 36: Geriatric Emergencies	Chapter 36 Homework Study for Quiz 5
45		Quiz 5: Chapters 23, 24, 34, 35 & 36 NREMT Skills Lab BVM Ventilations CPR and AED Medical Patient	Read and Take Notes: Ch. 26
46		Chapter 26: Bleeding Stop the Bleed	Chapter 26 Homework Read and Take Notes: Ch. 13
47		Chapter 13: Shock	Chapter 13 Homework Read and Take Notes: Ch. 27
48		Chapter 27: Soft Tissue Injuries	

Southington High School EMT Program
88 min classes

49		Chapter 27: Soft Tissue Injuries	Chapter 27 Homework Read and Take Notes: Ch. 32
50		Chapter 32: Orthopedic Trauma	Chapter 32 Homework Read and Take Notes: Ch. 28
51		Chapter 28: Face and Neck Injuries	Chapter 28 Homework Study for Quiz 6
52		Quiz 6: Chapters 13, 26, 27, 28 & 32 NREMT Skills Lab Bleeding Control Long Bone Immobilization Joint Immobilization Trauma Patient	Read and Take Notes: Ch. 29
53		Chapter 29: Head and Spine Injuries	Chapter 29 Homework Read and Take Notes: Ch. 30
54		Chapter 30: Chest Injuries	Chapter 30 Homework Read and Take Notes: Ch. 31
55		Chapter 31: Abdominal and Genitourinary Injuries	Chapter 31 Homework Read and Take Notes: Ch. 37
56		Chapter 37: Special Patient Populations	Chapter 37 Homework Read and Take Notes: Ch. 8
57		Chapter 8: Lifting and Moving Patients Lifting and Moving Lab	Chapter 8 Homework Study for Quiz 7
58		Quiz 7: Chapters 8, 29, 30, 31 & 37 Skills Lab	Read and Take Notes: Ch. 22
59		Chapter 22: Toxicology	Chapter 22 Homework Read and Take Notes: Ch. 33
60		Chapter 33: Environmental Emergencies	Chapter 33 Homework Read and Take Notes: Ch. 39
61		Chapter 39: Vehicle Extrication and Special Rescue	Chapter 39 Homework
62		Vehicle Extrication	Read and Take Notes: Ch. 41
All FEMA Assignments Due (5, 100, 200, 700 & 800) by class 63			
63		Chapter 41: Terrorism Response and Disaster Management	Chapter 41 Homework Read and Take Notes: Ch. 40
64		Chapter 40: Incident Management	Chapter 40 Homework Study for Quiz 8
65		Quiz 8: Chapters 22, 33, 39, 40 & 41 Skills Lab	
66		MCI Drill	
All Patient Care Reports and Vital Sign Logs are due by class 67			
67		Skills Lab	
68		Skills Lab	
69		Skills Lab	
70		LEAVE OPEN (Snow Days and Schedule Changes)	
71		LEAVE OPEN (Snow Days and Schedule Changes)	
72		Final Practical Skills Evaluation	
73		Final Practical Skills Evaluation	
74		Final Practical Skills Evaluation	
75		Final Practical Skills Evaluation	
76		Final Practical Skills Evaluation	
77		Final Written Exam	
78		Final Exam Makeups	

Southington High School EMT Program
88 min classes

79		Final Exam Makeups	
80		Final Exam Makeups	

Certification Course

Lab and Skills

Quizzes and Exams

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. m.

AGENDA REPORTING FORM

Agenda Topic: SHS Archery Unit Proposal- First Reading.

Summary of Issue: SHS Archery Unit Proposal- First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Archery Unit Proposal– to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Archery in Physical Education:

Value & Meaning

Bringing Back A Beloved Activity

Summary

Archery used to be taught at SHS (2016-2017) and we want to bring it back for a variety of reasons. Archery is a safe, developmentally appropriate and fun activity that fits in perfectly with our new department Vision, Mission, and Beliefs.

Understanding Our Goal

Vision

SHS graduates are committed to the pursuit of healthy and active skills to achieve lifelong physical, intellectual, emotional and social wellness.

Mission

The SHS HPE Department will engage all students in meaningful experiences to promote the development of health enhancing behaviors through a challenging yet safe learning environment which emphasizes the importance of relationships and inspires students to seek lifelong wellness.

Beliefs

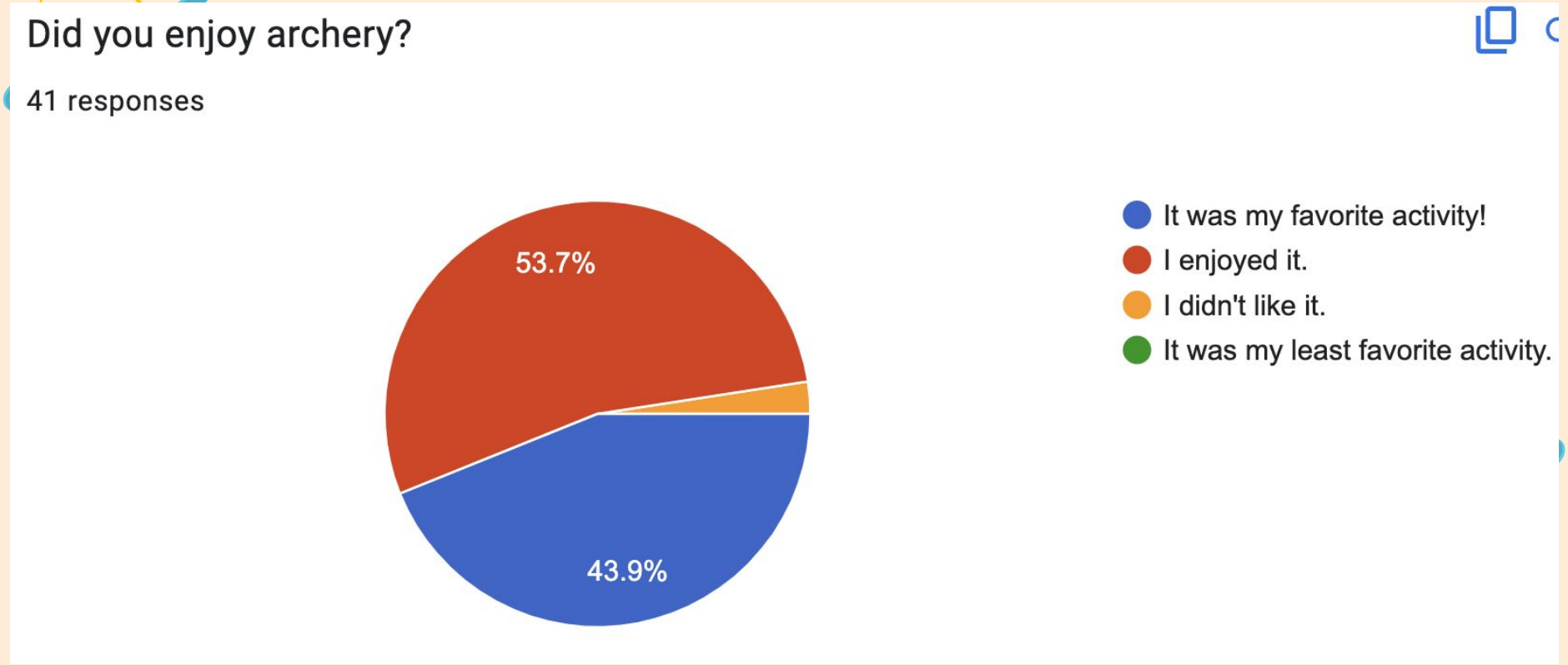
- HPE are vital components of one's educational experience
- HPE skills transfer to many aspects of life
- Movement & activity is for everyone
- Healthy living improves your Q.O.L
- Exercise is just as much for the brain as it is the body
- Being confident in your abilities as a mover now greatly increase the likelihood you will be active later in life
- Wellness is a lifelong pursuit, not a 1-time goal

?

Why Archery?

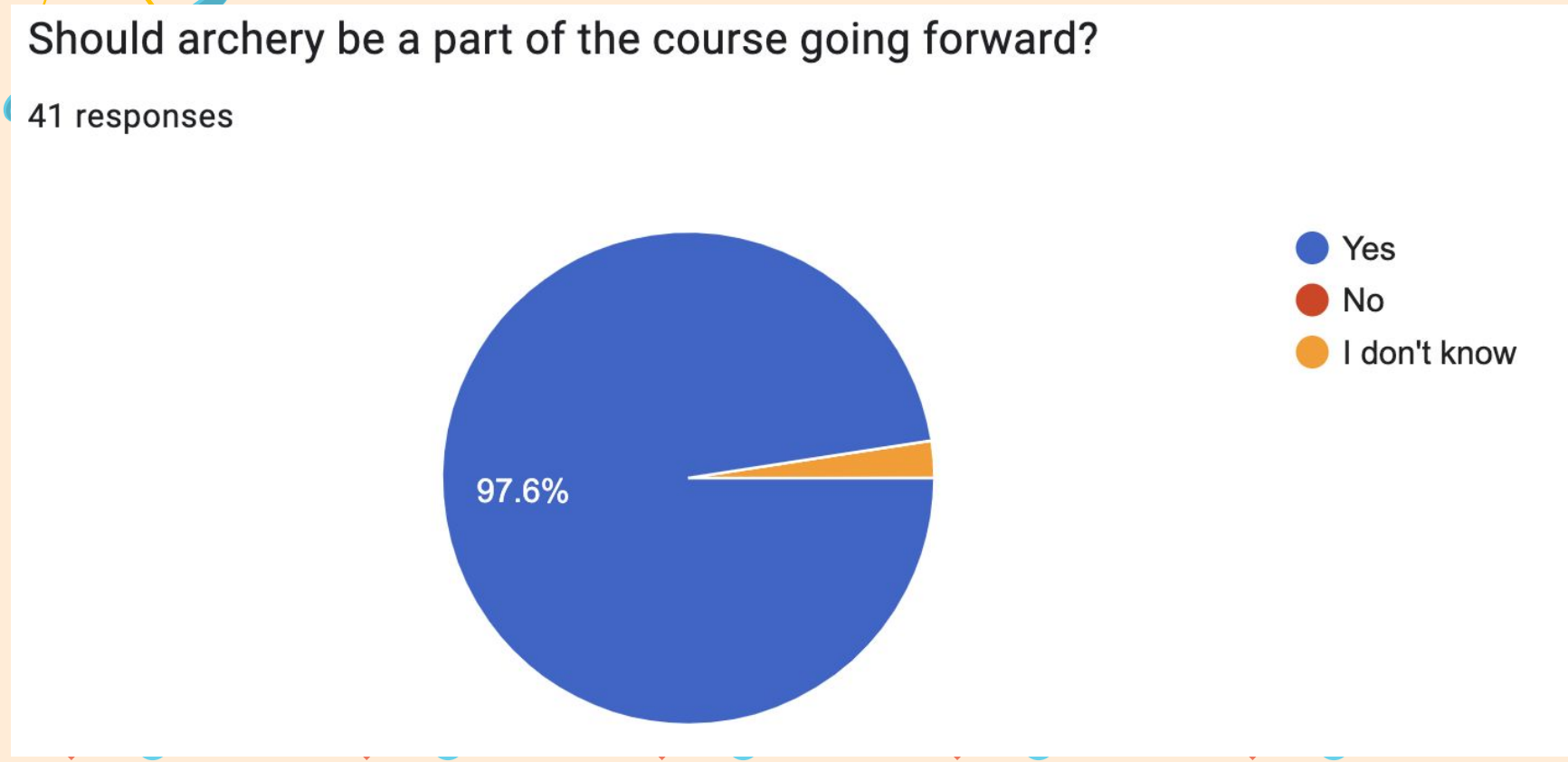
It’s All About The Students

What about other students?

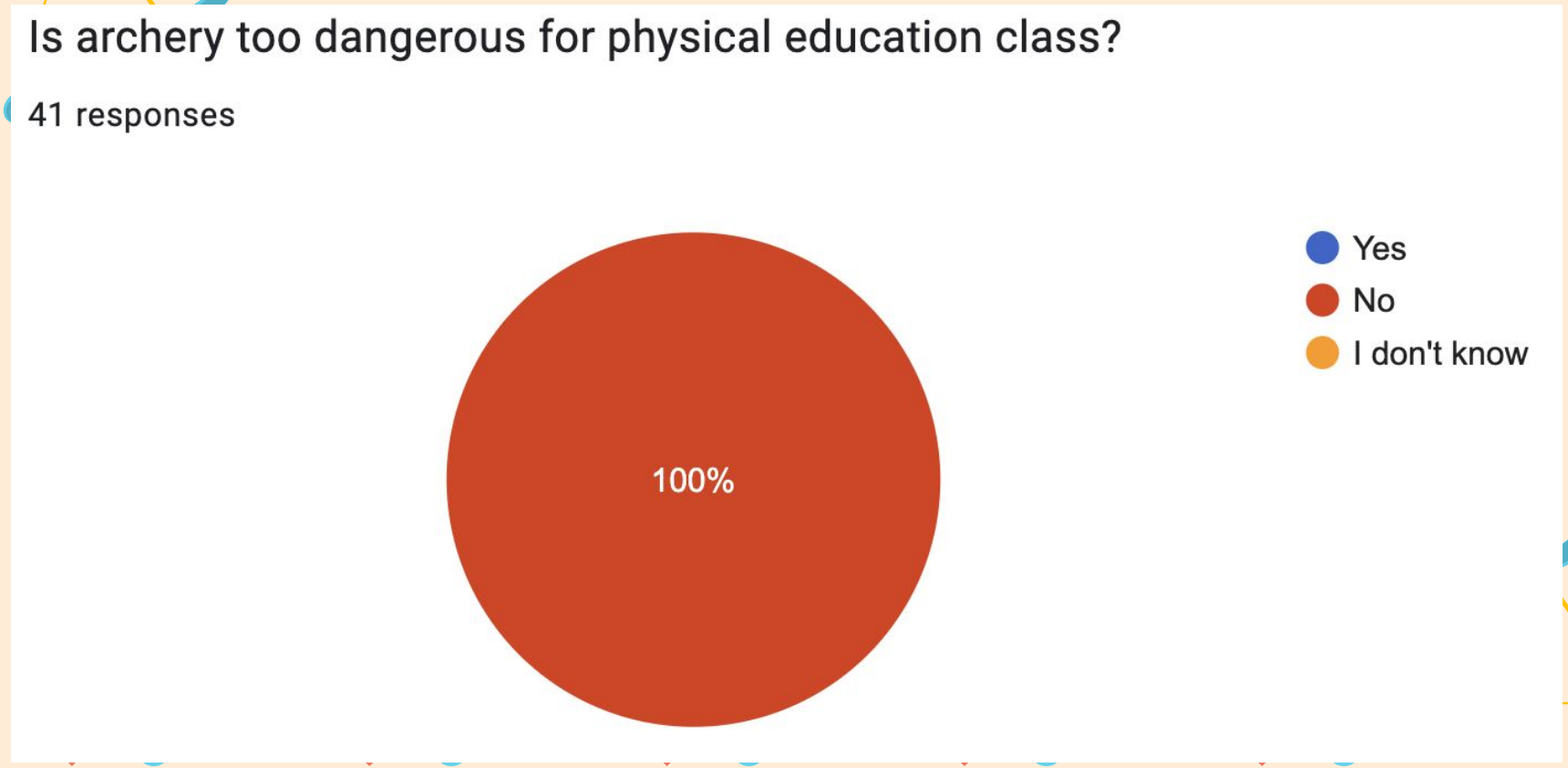


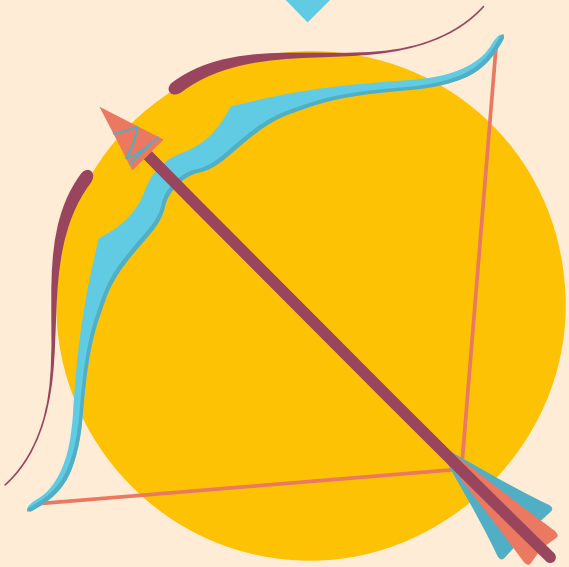
What about other students?

What about other students?



What about other students?



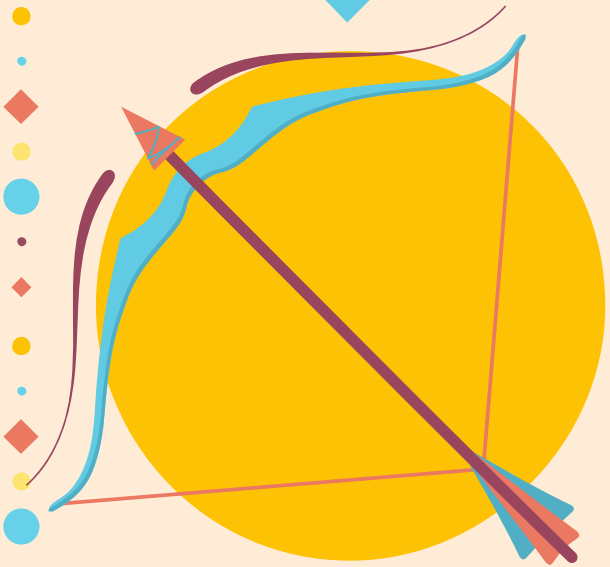


What Are Students Learning?

- Our seniors are learning about and developing their movement identities: the unique combination of activities you enjoy and regularly participate in that becomes part of who you are.

- Recreational activities are part of our movement identities: Any voluntary activity, structured or unstructured, that people engage in during their free time for enjoyment, relaxation, fitness, social interaction, or personal fulfillment.

- Archery is considered a recreational activity.



What Are Students Learning?

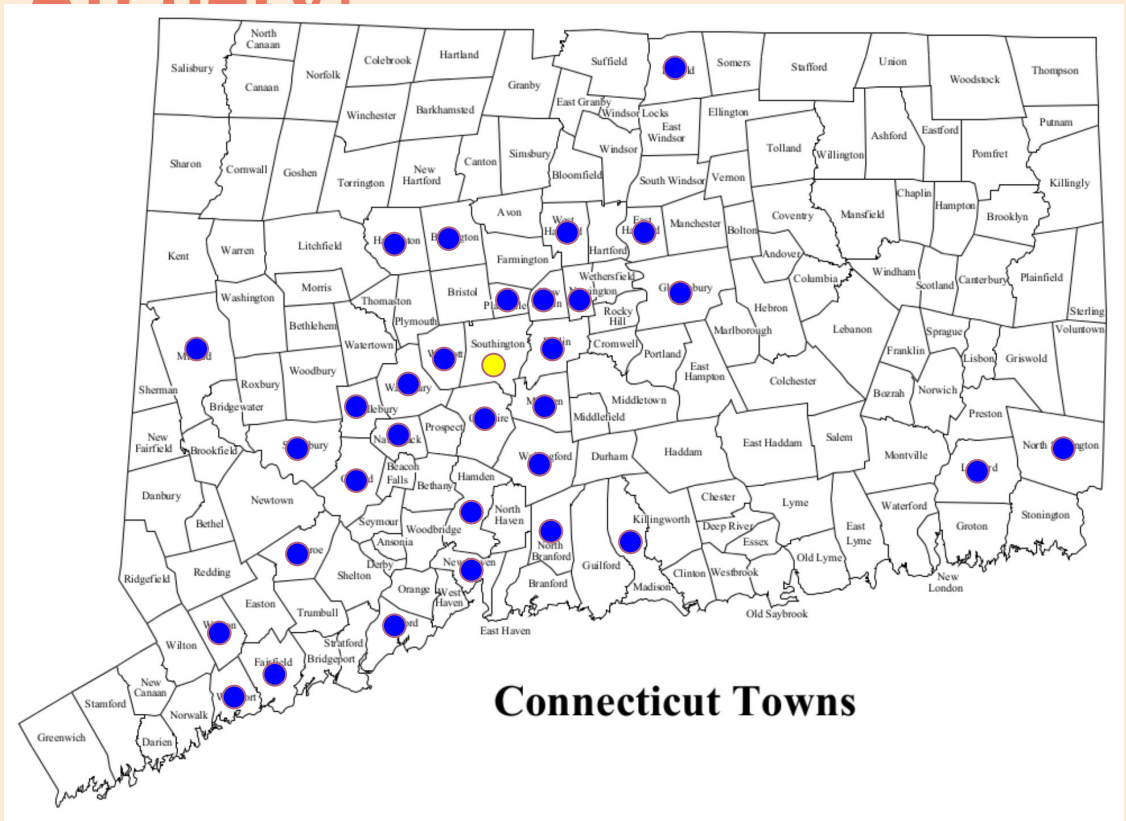
National Physical Education Standards

Standard 3: Develops social skills through movement.

Performance Indicator 3.12.6 - Applies best practices for participating safely in physical activity (e.g., proper etiquette, respect for others, injury prevention, use of equipment, implementation of rules).

Do any other districts offer Archery?

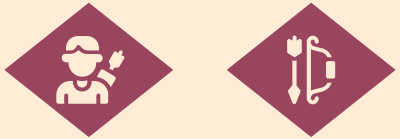
- CCSU
- SCSU



Okay … but is it SAFE?

Command Style Teaching

I say, you do.
Whistle commands posted and used.

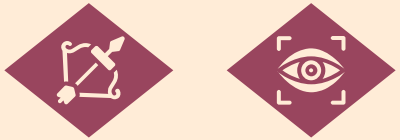


Major Emphasis on Safety

Safety is taught (first) and practiced.

Instruction

Setup and organization addresses safety.



Equipment

NASP: Designed for safety.
Designed for schools.

QUESTIONS?

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. n. 1.

AGENDA REPORTING FORM

Agenda Topic: SHS Agricultural Science Course Change Proposal - Proposal #1 – Advanced Equine Science- First Reading.

Summary of Issue: SHS Agricultural Science Course Change Proposal - Proposal #1 – Advanced Equine Science - First Reading.

Background: _____

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Agricultural Science Course Change Proposal - Proposal #1 – Advanced Equine Science – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Proposal #1: Split ADV Equine Science into ADV Equine Evaluation & Horsemanship and ADV Equine Management

ADV Equine Science Units:

1 Credit, ½ Year Course

Every Year

Introduction

Evolution of the Horse

Selection

Anatomy (Skeletal/Muscular)

Reproduction

Nutrition

Health and Disease

Training/Handling

ADV Equine Management Units: **1 Credit, ½ year course** **Year 1**	**ADV Equine Evaluation & Horsemanship Units:** **1 Credit, ½ year course** **Year 2**
Introduction to Equine	Introduction to Equine
Equine Nutrition and Digestion	Evolution of the Horse
Equine Health and Disease	Selection/Evaluation (Breeding/Showing)
Equine Reproduction	Equine Muscular/Skeletal System
Training and Handling	Training and Handling
Pasture/Manure Management	Equine Careers

Rationale: Right now, Advanced Equine Science tries to cover a huge amount of information in just one semester. There is so much to learn about the equine industry—ranging from health, nutrition, and facility management to handling, evaluation, and showmanship—that it is difficult for students to gain a full understanding in a single class. By splitting the course into Advanced Equine Management and Advanced Equine Evaluation & Horsemanship, students will be able to focus more deeply on each area, building stronger knowledge and skills that

will better prepare them for future opportunities in the horse industry. These new courses will be taught by our Large Animal Science teacher, ensuring consistency in instruction and expertise.

We also see steady interest from students in specializing in large animal and equine science, with 8–14 students each year choosing this pathway. Previously, the equine class ran every year as the exact same course, which limited student growth. With the new structure, one class will run in “Year 1” and the other in “Year 2,” giving students who are passionate about horses the chance to take more than one advanced equine class during their junior and senior years. This keeps them engaged in their chosen focus area while offering more opportunities to build skills. Overall, this change allows us to better meet student interest while strengthening our equine science program.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. n. 2.

AGENDA REPORTING FORM

Agenda Topic: SHS Agricultural Science Course Change Proposal - Proposal #2 – Advanced Livestock Science- First Reading.

Summary of Issue: SHS Agricultural Science Course Change Proposal - Proposal #2 – Advanced Livestock Science - First Reading.

Background:

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Agricultural Science Course Change Proposal - Proposal #2 – Advanced Livestock Science – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Proposal #2: Split ADV Livestock Management into ADV Ruminant Livestock and ADV Non-Ruminant Livestock

ADV Livestock Science Units:

1 Credit, ½ Year Course

Every Year

Introduction

Small Ruminant Anatomy and Physiology

Small Ruminant Nutrition and Health Management

Cattle Anatomy and Physiology

Cattle Nutrition and Health Management

Poultry

Swine

Exotics

ADV Ruminant Production Units:
1 Credit, ½ year course
Year 1

Introduction

Goat

Sheep

Cattle

ADV Non Ruminant Production Units:
1 Credit, ½ year course
Year 2

Introduction

Hog

Poultry

Exotics

Each unit will cover the following subjects relating to their species: Terminology, Anatomy, Handling/Restraint, Feeding & Management, Reproduction, Health and Disease, and Careers

Rationale: Right now, Advanced Livestock Science tries to cover a huge amount of information in just one semester. Students are expected to learn about both ruminant and non-ruminant species across a wide range of topics—terminology, anatomy, handling and restraint, feeding and management, reproduction, health and disease, and careers. With so much to cover, it's difficult for students to gain a full understanding in just one class. By splitting the course into Advanced Livestock Management and Advanced Livestock

Evaluation & Showmanship, students will be able to focus more deeply on each area, building stronger knowledge and skills that will better prepare them for future opportunities in the livestock industry. These new courses will be taught by our Large Animal Science teacher, ensuring consistency in instruction and expertise.

We also see steady interest from students in specializing in large animal and livestock science, with 8–14 students each year choosing this pathway. Previously, the livestock class ran every year as the exact same course, which limited student growth. With the new structure, one class will run in “Year 1” and the other in “Year 2,” giving students who are passionate about livestock the chance to take more than one advanced livestock class during their junior and senior years. This keeps them engaged in their chosen focus area while offering more opportunities to build skills. Overall, this change allows us to better meet student interest while strengthening our livestock science program.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. n. 3.

AGENDA REPORTING FORM

Agenda Topic: SHS Agricultural Science Course Change Proposal - Proposal #3 – Veterinary Technology- First Reading.

Summary of Issue: SHS Agricultural Science Course Change Proposal - Proposal #3 – Veterinary Technology - First Reading.

Background:

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Agricultural Science Course Change Proposal - Proposal #3 – Veterinary Technology – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Signature of Staff Member Submitting Report

Signature of Superintendent of Schools

Proposal #3: Split Veterinary Technology (Middlesex CC) into MXCC - Veterinary Technology and MXCC Veterinary Science

Veterinary Technology (Middlesex CC)

1 Credit, ½ Year Course

Every Year

Ethics and Jurisprudence

Veterinary Practice Management

Preventative Health Care

Reproduction and Neonatology

Small and Large Animal Nutrition

Small and Large Animal Diagnostic Techniques and Nursing Skills

Animal Behavior

Veterinary Technology Units: **1 Credit, ½ year course** **Year 1**	**Veterinary Science Units:** **1 Credit, ½ year course** **Year 2**
Ethics and Jurisprudence	Facility Management and Safety
Veterinary Practice Management	Handling and Restraint
Preventative Health Care	Canine
Reproduction and Neonatology	Feline
Training and Handling	Equine
Small and Large Animal Nutrition	Production Animals
Nursing and Diagnostic Techniques	Exotic and Lab Animals
Animal Behavior	Nutrition

Rationale: From 2018–2024, the MXCC Veterinary Science program was taught as a yearlong course, combining two Middlesex Community College courses into one class. Last year, we attempted to scale the program back to only one of the veterinary courses in general, with the goal of creating more room in student schedules for other classes. However, after clarification from Middlesex Community College, both courses are required to be taught. To meet this requirement, we propose teaching the MXCC Veterinary Science course in Year 1 and the MXCC Veterinary Technology course in Year 2, rotating them on a yearly basis.

This structure ensures that students—whether juniors or seniors—will have access to both courses during their time in the program. Offering both courses separately provides a more in-depth, hands-on learning experience, better preparing students for careers in the veterinary field.

This change also reflects student interest: this year alone, 35 students are enrolled in the MXCC Veterinary Technology course, and we typically have 10–30 students interested annually. With Nicole Wilcox available to teach the Veterinary Science course, including up to two sections if needed, we have both the staffing and student demand to support the two-course model.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only X **Board Meeting Date** December 11, 2025

Decision Requested _____ **Agenda Code** 10. n. 4.

AGENDA REPORTING FORM

Agenda Topic: SHS Agricultural Science Course Change Proposal - Proposal #4 – Advanced Wildlife- First Reading.

Summary of Issue: SHS Agricultural Science Course Change Proposal - Proposal #4 – Advanced Wildlife - First Reading.

Background:

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: N/A

Ending Date of Program or Project: N/A

Recommendation or Comment: The Board of Education Curriculum & Instruction Committee is bringing the SHS Agricultural Science Course Change Proposal - Proposal #4 – Advanced Wildlife – to the full Board for a First Reading.

Titles of Attachments:

1. Course Proposal

Frank Ryan

Signature of Staff Member Submitting Report

Peter Madaras

Signature of Superintendent of Schools

Proposal #4: Split Advanced Wildlife into Advanced Global Conservation and Advanced Wildlife Conservation and Biology

Advanced Wildlife

1 Credit, ½ Year Course

Every Year

Wildlife Conservation

African Ecology and Conservation

History of Conservation and U.S. National Parks and Forests

North American Wildlife Management

Global Biodiversity - Asia & South America

Advanced Global Conservation Units: 1 Credit, ½ year course Year 1	**Adv. Wildlife Conservation & Biology Units: 1 Credit, ½ year course Year 2**
Wildlife Conservation	Wildlife Ecology and Field Methods
African Ecology and Conservation	Population Studies & Wildlife Data Analysis
History of Conservation and U.S. National PArks and Forests	Wildlife Habitat Management & Restoration
North American Wildlife Management	Endangered & Invasive Species Management
Global Biodiversity - Asia & South America	Wildlife Health, Diseases and Human Interaction
	Conservation Policy, Careers and Communication

Rationale: This is a large subject area to cover and encompasses conservation issues ranging from Southington, then expanding the scope to include Connecticut, New England, The United States, North America and then the world. It would be beneficial to students interested in this career pathway to split the class into two: focusing on global conservation issues with emphasis in careers in national and international conservation, and delving more into local and regional career opportunities in conservation. Both courses will also cover material in preparation for the Natural Resources Career Development Event through The National FFA Organization.

On average, the Wildlife course has between 10 and 20 students interested in enrolling each year. By dividing the current course into two distinct offerings, we can provide those students with the opportunity to explore the subject of Wildlife in greater depth. At present, Morgan Maglio and Owen McLaughlin alternate teaching the course each year, covering the same content. This rotation will remain the same; however, the instructional content will be differentiated between the two courses.

BOARD OF EDUCATION
SOUTHINGTON, CONNECTICUT

Informational Only _____ Board Meeting Date December 11, 2025

Decision Requested X Agenda Code 10 o.

AGENDA REPORTING FORM

Agenda Topic: **Superintendent's Annual Report 2024-2025**

Summary of Issue: The Superintendent's Annual Report summarizes the significant events and issues of the preceding school year. This report is incorporated into the Town's Annual Report.

Background: N/A

Alternative Strategies: N/A

Cost (if applicable): N/A **Funding Source:** N/A

Beginning Date of Program or Project: July 1, 2024

Ending Date of Program or Project: June 30, 2025

Recommendation or Comment: Recommend that the Superintendent's Annual Report for the 2024-2025 school year be approved as submitted.

Steven Madaras

Signature of Superintendent of Schools

Titles of Attachments:
1. Superintendent's Annual Report 2024-2025

SOUTHINGTON
Public Schools

Superintendent's Annual Report
2024-2025

Superintendent's Annual Report

2024-2025

Southington Board of Education

Colleen W. Clark, Board Chairperson
Joseph Baczewski, Vice Chairperson
Cecil Whitehead, Secretary
Robert S. Brown
Terri C. Carmody
Sean M. Carson
David J. Derynoski
Zachary M. Foti
Zaya G. Oshana

Central Office Staff

Steven G. Madancy, Superintendent of Schools
Frank M. Pepe, Assistant Superintendent of Schools
Jennifer S. Mellitt, Director of Business & Finance
Peter J. Romano, Director of Operations
Amy Zappone, Director of Teaching and Learning
Amy Aresco, Interim Director of Pupil Services
Michelle Passamano, Human Resource Manager
Jessica Poon, Information Systems Manager
Tyler Savage, Network Manager
Rebecca Savelkoul, Digital Learning Coordinator
Kyle Fickel, Accounting Manager

Superintendent's Annual Report
2024-2025

TABLE OF CONTENTS Pages

Southington Public Schools
Superintendent's Annual Report 2024-2025

SUPERINTENDENT'S EXECUTIVE SUMMARY

Steven G. Madancy, Superintendent of Schools

The 2024–2025 school year marked significant progress and shared achievement across Southington Public Schools. Guided by our Vision of a Graduate, the district continued to enhance instructional practices, support student well-being, and expand innovative learning opportunities. The professionalism and dedication of our staff remained at the core of every improvement this year.

One of the most important achievements was the districtwide progress in literacy aligned with the Science of Reading. In grades K–2, teachers fully adopted the Benchmark Advance curriculum, leading to measurable improvements in foundational reading skills, phonics, and early comprehension. Teachers in grades 3–5 participated in extensive professional development to prepare for next year's curriculum adoption, ensuring consistency across all elementary classrooms. At the middle school level, educators continued to expand their understanding of adolescent literacy, piloting new curriculum tools and enhancing instructional strategies. A districtwide structured literacy team also improved intervention systems, strengthened supports for students with dyslexia, and promoted consistent, research-based literacy instruction across schools.

Southington High School continued its efforts to expand career pathways and real-world learning experiences for students. With support from a grant-funded Career Pathways Liaison, the high school aligned its Program of Studies, Career Fair, and transition programs to help students better explore pathway options. Partnerships with regional colleges led to a record number of students participating in dual enrollment coursework, enabling them to earn college credits while still in high school. Work-based learning opportunities also grew, with new internship placements and community partnerships supported through the district's transition to the Maia Learning platform. These initiatives further enhanced students' readiness for their post-secondary plans.

In building towards effective implementation of school climate legislation, the district administration worked extensively to learn and prepare for a shift to a restorative practices approach, coupled with multiple training sessions on trauma-informed instruction. Additionally, a districtwide focus on emotional intelligence continued to enhance the overall school climate. Schools used RULER tools, including mood meters, charters, and emotional vocabulary, to help students better understand and regulate their emotions. The STEPS Asset Building Classroom program provided ongoing instruction in empathy, responsibility, and decision-making, while advisory programs and leadership opportunities fostered a sense of connection and value within school communities. Many schools also expanded their use of mentorship structures and student-centered leadership programs to encourage belonging and positive relationships.

Instructional innovation remained a key feature of the district's efforts this year. Teachers in grades 3–12 continued to strengthen their use of the Building Thinking Classrooms model, which encourages collaboration, problem solving, and critical thinking. Science instruction was enhanced through NGSS-aligned units and expanded field experiences, supported by longstanding partnerships with the LEAF program and YMCA Camp Sloper. Across the district, students participated in meaningful learning connected to the arts, technology, robotics, athletics, and student leadership, showcasing the wide range of opportunities available to them.

In addition to the significant instructional work occurring across Southington Public Schools, the district's operational departments- Operations, Human Resources, Business & Finance, and Technology- played critical roles in ensuring that our schools remained safe, functional, well-resourced, and forward-looking throughout the 2024–2025 school year.

The Operations Department oversaw a wide range of capital and facility improvements, including the completion of a partial roof replacement at Southington High School, the construction of a secure new main-entrance vestibule, and renovations of instructional spaces across multiple schools. The team also managed major infrastructure enhancements, including expanded security camera systems, ADA accessibility upgrades, and ongoing environmental and safety compliance efforts. Operations strengthened emergency preparedness by coordinating monthly drills with local police and fire departments and continued to modernize districtwide processes through expanded use of digital platforms.

The Human Resources Department advanced several initiatives to modernize staffing systems and enhance employee support. This included updating hiring procedures, digitizing onboarding and offboarding workflows, reviewing and revising job descriptions, and implementing new employment verification processes in collaboration with state partners. Human Resources also ensured districtwide compliance with mandated training requirements and expanded professional learning opportunities to strengthen recruitment, retention, and workplace culture.

Within Business and Finance, the district successfully transitioned to an updated financial and HR software system, negotiated major service contracts, and implemented new fraud-protection measures to safeguard district funds. Food Services returned to pre-pandemic operational stability, modernized its point-of-sale systems, and managed equipment upgrades across multiple schools. The business office also secured grants to support students and families experiencing homelessness and closely managed leasing, procurement, and budgeting responsibilities that sustain district operations.

The Technology Department continued to advance infrastructure, security, and digital learning systems. Key work included upgrading cloud and cybersecurity systems, refreshing computer labs, enhancing camera systems at the middle schools, and expanding the use of districtwide digital tools such as ClassLink, Canvas, SmartPass, and ParentSquare. Technology also launched the new Student Help Desk Internship, strengthened data systems to support accountability and

scheduling, and expanded cross-department collaborations among HR, Operations, and Curriculum to improve workflow efficiency and system integration across the district.

Together, these operational achievements reflect the expertise and dedication of the teams who ensure that the district's systems function smoothly and safely every day. Their work, largely behind the scenes, provides the essential foundation that allows teaching and learning to thrive.

The progress achieved this year reflects the remarkable dedication of Southington's teachers, administrators, support staff, and families. Together, we continued to create learning environments that emphasize academic excellence, emotional intelligence, and practical skills. The accomplishments of 2024–2025 have well prepared us for the work ahead, and we remain committed to helping every learner succeed in our district.

CURRICULUM AND INSTRUCTION

Amy Zappone, Director of Teaching and Learning
Stephanie Lawlor, K-8 English Language Arts & K-5 Social Studies Coordinator
Alicia Naleway, K-8 Mathematics & K-5 Science Coordinator

K-8 English Language Arts

This year marked significant progress in strengthening literacy instruction across the district. In grades K–2, teachers successfully launched the new ELA program, Benchmark Advance. Teachers participated in ongoing professional learning throughout the year and collaborated closely with literacy coaches to ensure effective implementation. Instruction was intentionally aligned with the Science of Reading, and as a result, there were notable gains in reading achievement for our youngest learners observed.

In grades 3–5, teachers started professional learning on the Science of Reading to prepare for adopting Benchmark Advance. During the spring, teachers engaged in sessions with professional learning materials from Benchmark, enabling them to preview the program and build readiness for implementation.

Across all grade levels, teachers and the literacy team continued to use DIBELS for benchmark assessments and progress monitoring. Each elementary school formed a School Literacy Leadership Team to evaluate the overall health of the literacy system in their building. These teams reviewed DIBELS data with a threefold focus: first, to check the health of Tier 1 instruction and identify where it needed to be strengthened; second, to assess the health of tiered supports and practices by monitoring tier movement; and third, to create action plans that addressed identified needs. This collaborative work provided valuable insights to guide instructional decision-making and ensure students received the right support at the right time.

At the middle school level, teachers participated in professional development centered on the Science of Reading and examined its implications for adolescent literacy instruction. An ELA Curriculum Committee was established to review potential new programs, and teachers piloted CommonLit 360 as a possible new curriculum resource. This work has laid the groundwork for careful decision-making regarding future ELA curriculum adoption at the secondary level.

Overall, the district has made significant progress in establishing consistent literacy practices and aligning instruction with research-based methods. With notable gains in reading already visible in grades K–2, grades 3–5 well prepared for next year's implementation, and middle school teachers engaged in proactive curriculum review, the district is clearly on a path toward stronger, districtwide ELA outcomes.

K-8 Mathematics

Over the 2024- 20025 school year, teachers in grades K-5 continued to implement the recently updated Ready Classroom. Teachers in the grade 3-5 band level reflected on the current implementation and structure of the math block and made adjustments to better align with the updated Ready Classroom structure. Teachers continued to utilize iReady diagnostic data to track student achievement and growth. Thanks to the support of a large SEF grant, teachers in grades 3-5 participated in a year-long professional learning study of the book Building Thinking Classrooms and its effective instructional practices in math. Some of these practices included

Ways to enhance students' thinking and engagement include using thinking tasks, making student strategies more visible with whiteboards, and increasing opportunities for discourse by working collaboratively in frequently changing, visibly random small groups. The elementary math team supported teachers with this new learning through professional development, coaching and modeling, and facilitating a book study throughout the school year. Additionally, the elementary math specialists in Grades K-5 engaged in coaching cycles with new teachers, led professional learning on analyzing grade-level data, and provided interventions for students needing math support.

The middle school mathematics department continued the implementation of the district's Illustrative Mathematics curriculum with a focus on implementing backwards design in unit planning as a way to help students achieve grade level content mastery. The math department also continued learning about incorporating high yield instructional strategies from the book, Building Thinking Classrooms. Middle school math teachers tried vertical whiteboards and visibly random groups to help increase student autonomy, engagement and discourse in math. In addition, there was a focus on utilizing strategies for synthesizing and consolidating learning in a problem based-math curriculum. The middle school math department continued to utilize iReady to track student data and growth. The department continued to analyze Smarter Balanced data and made instructional adjustments to the scope and sequence to address areas of focus. The two middle school math specialists continued to support teachers with instructional strategies, helped to facilitate the SRBI process, and provided interventions to students in need of math support.

K-8 Science

In elementary science, grades K-5 continued implementing the Next Generation Science Standards (NGSS) units that focus on scientific inquiry through phenomena-based instruction. Fifth grade students participated in the Connecticut Invention Convention, which promotes creative problem solving and critical thinking skills through invention and entrepreneurship. Southington had 27 fifth grade students who were state finalists at the Connecticut Invention Convention.

The district maintained its strong partnership with Lewis Educational Agricultural Farm (LEAF) this year. Mark Ramsay collaborated with the science department, students, and teachers across all elementary schools in second grade to plant school gardens. Additionally, the district continued coordinating with YMCA Camp Sloper staff to support a fourth-grade field trip to the facility. All fourth-grade students participated in a field trip to YMCA Camp Sloper that connected to their science curriculum unit, "Land and Water." Furthermore, second-grade students visited Sloper to explore the environment and learn about animal habitats.

The middle school science department continued implementing Open Sci Ed units across all three grades, with a focus on student engagement. Teachers in the department participated in professional learning based on the book "Building Thinking Classrooms," during which they experimented with vertical whiteboards as a classroom strategy to promote student thinking. The department plans to implement vertical whiteboards to support inquiry-based teaching and learning in science.

K-8 Social Studies

The social studies curriculum coordinator continued reviewing the newly released Connecticut Social Studies Standards while simultaneously aligning them with the new ELA program. As part of this process, it was

essential to ensure that the knowledge-building topics in ELA connected meaningfully to the social studies curriculum. Through this alignment work, Benchmark Advance includes three units per grade level that directly align with social studies themes in government and citizenship, history, culture, geography, and economics.

The middle school social studies department participated in a year-long curriculum development process, using the new CT standards to create inquiry-based units. These units consist of several inquiry arcs designed to engage students across the four dimensions of inquiry: Developing Questions and Planning Inquiries, Applying Disciplinary Concepts and Tools, Evaluating Sources and Using Evidence, and Communicating Conclusions and Taking Informed Action. The new curriculum will be presented to the board in Fall 2025.

9-12 Academic Departments

Southington High School's academic departments continued to improve their teaching methods during the second year of block scheduling, using high-quality strategies aimed at increasing student engagement during longer learning periods. Teachers adopted innovative lesson design techniques to create meaningful learning experiences within extended instructional time blocks.

Curriculum development remains a key focus at SHS. Department leaders and faculty worked hard all year on projects aligned with the district's curriculum renewal cycle, prioritizing important curriculum needs and identifying courses that support the school's career pathway model.

This year's efforts led to the addition of several dual enrollment courses to the program of studies, along with expanded opportunities for students through internal and external internships and work-based learning experiences. Looking forward, the school is dedicated to further broadening work-based learning options to ensure all students can access high-quality career pathway opportunities.

BUSINESS DEPARTMENT

Jennifer S. Mellitt, Director of Business & Finance

The Business Department accomplished the following during the 2024-2025 school year.

Financial Summary of FY 2024-2025

The 2024-25 approved operating budget was $115,960,489. The approved budget included 18.86 new FTEs, such as a TESOL teacher to meet the growing needs of ML students, a new PreK-5 classroom, five elementary teachers to manage class sizes, a psychologist, and four mental health staff originally hired using ARP ESSER funding.

The Federal Title I grant for FY 2024-25 was $213,792, the lowest amount in more than 15 years. The highest Title I grant was awarded in 2021-22, totaling $554,527.

In December, the district submitted expenses for special education, including outplaced tuition and transportation, as well as in-district education costs of $10 million for 52 outplaced students and 14 in-district students. The district closely watched the legislative session in Hartford, particularly for funding related to the Special Education Excess Cost, which resulted in an additional $40 million for the excess cost reimbursement grant. This extra funding enabled the district to receive an additional reimbursement of $606,404 on June 18.

The lease for the space used for transition education for students aged 18-22 expired in December 2024. The district found a new site with lower rental costs for the 2025-26 school year. In June, the district spent $128,240 of FY 2024-25 operating budget funds to renovate the new space for Southington's Transitional Education in Life Learning Adult Responsibilities Program (STELLAR) to include two classrooms, a kitchen, and a small retail space, which will be part of the daily living skills curriculum.

Including the additional state reimbursement for special education excess costs, the district closed the 2024-25 year with unspent funds of $453,780, or 0.39% of the approved 2024-25 operating budget.

Unexpended Funds Account

A legislative change to Connecticut General Statute 10-248a in 2023-24 now permits the Board of Education to approve the deposit of unexpended operating budget funds, up to the statutory limit, into a non-lapsing account instead of the Town's Board of Finance. The Board of Education (BOE) approved depositing the full $453,780 into a new non-lapsing account held by the Town.

To date, the BOE has approved the use of FY 25 unexpended funds for various projects, including a $ 60,000 shortfall in the rubbish removal bid, $60,000 for contracted painting, $20,000 for sidewalk and walkway repairs, $25,000 for an EMS controller replacement, $ 68,350 for the high school upper field restoration, and $ 72,250 for an ADA-accessible stone dust path to the upper high school fields. The remaining unallocated non-lapsing funds amount to $190,580 as of now.

Budget Development 2025-2026

During the 2024-25 school year, the Board of Education developed and initially presented its 2025-26 operating budget to the Town of Southington's Board of Finance (BOF), amounting to $123,614,448, which is an increase of $7,653,959 or 6.60%. The BOE's budget included 2.4 FTE teachers to support the middle schools' transition to block schedules and a new stipend for the girls' golf coach

The BOF made reductions to the requested budget by decreasing contributions to the self-insurance fund by $858,400, removing certain technology and infrastructure expenses of $358,6000 into a separate fund at the town, and implementing an overall budget reduction of $500,000. The BOF's approved budget was also endorsed by the Town Council for a final FY 2025-26 Operating Budget of $121,897,448; an increase of $5,936,959 or 5.12%.

The $500,000 budget reduction was applied to the systemwide transportation due to continued negotiations from the RFP award, revised replacement schedule for extreme licenses in the districtwide computer maintenance account, a MERS reduction based on the updated rates provided by the state, and another health insurance reduction from our self-insurance consultant.

During the 2025-26 budget process, the Town boards also approved $320,732 for re-keying interior door locks, required environmental testing, costs related to converting to block schedules at the middle schools, classroom furniture, and an allocation for HVAC indoor air quality testing.

Office of the Director of Business and Finance

The Business Office supported operations during a leave of absence in the Food Service office from September through December by calculating and submitting meal claims, helping review applications for free and reduced-price meals, and managing other required reports.

After the expiration of a lease agreement for our STELLAR program in December, the administration identified a smaller, less expensive space in downtown Southington. The Business Office negotiated a new five-year lease with an option to renew. The new lease represents savings to the district of $60,000 in the first year.

The district received a new three-year McKinney Vento Homeless competitive grant for FY 2024-25, totaling $9,950 per year. This grant helped the District Registrar provide support to some of our homeless families.

The Business Office added new bank fraud protection services to our payroll and food service accounts during 2024-25. The services are payee positive pay and ACH monitor. These services already exist on our accounts payable account, and they will better safeguard the operating budget funds.

The Business Office also transitioned the district to an updated Financial and Human Resource system after Alio was sold to LINQ. The switch is currently being finalized; however, the district has successfully been using the new system for several months.

Purchasing Office

The Purchasing Department prepared bids and RFPs for services with expiring contracts, including transportation and rubbish removal. RFPs were sought with the help of a consultant for systemwide transportation in late fall, with an award planned for January 2025. The new three-year contract was negotiated with the assistance of Shipman and Goodwin.

The rubbish contract also expired in June 2025. The bid was awarded to CWPM at an increased cost to the district. The increase was due to changes in the rubbish removal industry and the sale of our long-standing previous rubbish removal vendor. The funding shortfall was addressed using the FY 25 unexpended funds as noted above.

The district also solicited bids or recommended awards for work based on cooperative purchasing consortia related to civil engineering and architectural services for a new Agricultural Science and Technology Barn to be constructed on Pleasant Street; for additional basketball hoops and gym floor improvements in the high school's west gym; the removal of the high school darkroom; and snow removal services.

The Purchasing Office also pursued an RFP for design services for the high school tennis court replacement in December 2024; however, no responses were received. The district then sought services through the CREC pricing consortium. A firm was hired to provide the design and projected construction costs for the tennis court replacement project.

The Purchasing Department also prepared bids for equipment purchases for the school kitchens during the year.

Payroll Office:

The Payroll Office continued to rise to the challenges presented by new technology implementation and governmental changes. The Payroll Supervisor continued to improve the use of the Frontline time and absence reporting system by rolling it out to the Food Service operations and supporting their bookkeeper through the processes.

The state of CT provided another subsidy to support Paraeducators' Health Insurance. The district received $228,266 to deposit into paraeducators' HSA accounts in October 2024. The payroll department worked in conjunction with paraeducators who were close to their IRS contribution limit to maximize the benefit for every paraeducator.

The benefits department hired a new staff member after a retirement. The staff is being cross-trained to expand their knowledge in both benefits work and payroll processing.

Food Services

The 2024-25 school year meal funding included Connecticut State Department of Education funds through Public Act 24-81 to offer one free breakfast and one free lunch to students who qualify for reduced-price meals. This differed from the previous year's funding, which provided free breakfast for all students. As expected, this change in funding led to fewer breakfast meals being served, as students not eligible for free or reduced-price meals began paying for their breakfast. The total number of breakfast meals served in 2024-25 was 111,788, which is 138,920 fewer than in 2023-24. Despite the decrease in breakfast servings, the food service operations posted a net profit of $71,479, marking a return to pre-pandemic operational levels

The district upgraded the point-of-sale computer software used at the kitchen registers from OneSource to Horizon. The new software is cloud-based with updated security features as required by our network. The district also replaced several large pieces of equipment, including two steamers at the middle schools and a dishwasher at Kelley Elementary. An audit of the equipment has recently been completed, and a replacement cycle is currently being developed.

Like many districts across the state, changes in meal funding resulted in students accruing meal debt. Despite collection efforts, the district ended the year with over $18,000 in negative student meal debt. Connecticut authorized school Food Service operations to use excess funds to eliminate this negative balance at the end of the 2024-25 school year.

The kitchen staff at all schools continue to work hard to ensure hot, healthy meals are available to all our students.

OPERATIONS

Peter Romano, Director of Operations

The Operations Office has accomplished the following items during the 2024-2025 school year:

Construction and Building System Improvements

- The partial roof replacement at Southington High School was completed before the start of the 2024–2025 school year. The new roof system carries a 30-year warranty. With the roofing work finished, the Building Committee has coordinated with the State Department of Administrative Services (DAS) to secure approval for grant funding for the photovoltaic (solar) system. This portion of the project will be bid and installed during the 2025–2026 fiscal year.

- Construction of a new vestibule entry addition at the main entrance of Southington High School has been completed. The new entrance provides a secure vestibule and includes a dedicated room for security staff to communicate with and monitor visitors.

- Additional security cameras were installed at the middle schools using safety and security funding provided by the Town.

- Bi-monthly roof inspections were conducted at all schools to gather data that informs strategies to ensure reliable, long-term performance and extend the life cycle of roofs districtwide. The Town is planning to bring a referendum to voters in Fall 2025 to replace roofs at Hatton Elementary School (HES), Strong Elementary (SES), and Thalberg Elementary School (TES).

- The replacement of the six-lane running track surrounding the all-purpose field at Southington High School has been completed. A state grant primarily funded this project.

- The STELLAR program was relocated from its Abbey Park location to 48 North Main Street. This project involved a complete build-out and conversion of a previous retail space. An architect was retained, the bid process was fast-tracked, and the Operations team oversaw the construction. The Maintenance Department supported the project by moving program materials and assisting with portions of the build-out.

- The tennis courts at Southington High School were patched again this year while the Administration and Town representatives continue to develop a long-term replacement plan.

- The former darkroom space at Southington High School was fully renovated and transformed into a large, modern classroom. The project included the removal of outdated equipment, upgrades to lighting, installation of new flooring and finishes, and technology enhancements to support flexible instructional use. This renovation provides students and staff with a bright, functional learning environment that better supports current curriculum needs.

- To create additional instructional areas, dividing walls were added to classrooms at Southington High School (SHS), Joseph A. DePaolo Middle School (JAD), John F. Kennedy Middle School (JFK), and South End Elementary School (SES). All work was

completed in-house by the Maintenance Department without the need for outside contractors. This project expanded teaching space while maximizing available resources.

- Barn for the Ag-Sci Program – The Agricultural Science program has secured funding to construct a barn on the open space property adjacent to DePaolo Middle School. Operations has engaged and is working with architectural and engineering support to design the facility.

- SHS Interior Keying – The town has funded a vital security initiative to modernize the interior door locking system. Operations is overseeing the project, with in-house maintenance carpenters performing the modernization work.

- ADA Accessibility Enhancements – The district continues to implement high-contrast stair and railing markings in select schools, in accordance with ADA Standards for Accessible Design, to support vision-impaired students.

Transportation

- NBT continued to face challenges maintaining adequate staffing levels to fully meet the district's transportation needs, a difficulty common among school transportation vendors across Connecticut. Despite these challenges, the district worked closely with NBT and other providers to ensure that both regular and special education programs continued to receive reliable service. In addition, transportation was successfully provided for the summer enrichment programs and the Extended School Year (ESY) program.

- The Purchasing Department, in collaboration with the Operations Department, conducted an RFP process for a new transportation contract. Of the seven transportation companies that initially expressed interest, only two submitted proposals. NBT submitted the lowest-cost proposal and was subsequently awarded the contract by the Board of Education.

Energy Conservation

- Energy Management System (EMS): Ten of the district's schools are now connected to the web-based dashboard. This system continues to enable ongoing monitoring and programming to ensure optimal efficiency and the health of school buildings.

Reporting

- Radon Testing Programs – Radon testing was performed in accordance with EPA and state guidelines. Radon testing is required at all schools every 3 years.

- During the summer break, the district worked with vendors to test fire sprinklers, fire alarms, generators, fire extinguishers, smoke detectors, and kitchen hood Ansul systems at all schools. All systems passed, and the results were shared with the Southington Fire Department (SFD).

- The Operations Department oversaw the preparation and submission of the required school safety and security plans for all schools, which must be submitted to the state on an annual basis.

Health and Safety

- In collaboration with the Southington Police and Fire Departments, Operations coordinated and participated in monthly emergency drills and district-wide fire drills across all schools.
- Operations chaired the Districtwide Safety Committee, which met quarterly with representation from all unions to address districtwide staff safety concerns.
- Additional two-way radios were received, programmed, and deployed to schools to strengthen emergency communication.
- Polychlorinated Biphenyl (PCB) testing was conducted at J.A. DePaolo Middle School, JFK Middle School, and the John Weichsel Municipal Center. Test results were significantly below EPA action thresholds, with many areas registering non-detectable levels. The district continues to collaborate with its environmental attorney to pursue relief from ongoing testing requirements.

Administrative Enhancements

- Operations partnered with the Human Resources Department to review and strengthen custodian support and training. This initiative included a survey, a large group meeting, and collaboration with union representatives and individual custodians.
- Operations managed and maintained the district's online reporting system for fire and safety drills, which are reported annually to the CT State Division of Energy Management and Homeland Security.
- The department expanded its electronic infrastructure, transitioning more processes into Google Docs, Sheets, and Forms. This shift has created efficiencies and improved districtwide information sharing. Electronic tools are now used for transportation tracking logs, transportation requests and complaints, snow-removal vendor coordination, lawn-maintenance vendor tracking, and custodian scheduling.

District-wide and Town Collaboration

- Shared Resources: Operations continued its ongoing collaboration with the town to complete repairs, service calls, and projects at municipal buildings. Support was provided for the Southington Police Department, Animal Control, Fire Department, Highway Department, and Town Hall.

HUMAN RESOURCE DEPARTMENT

Michelle Passamano, Human Resource Manager

The focus of the Human Resource Department during the 2024-2025 fiscal year was to strengthen technology integration, enhance recruitment and hiring efficiencies, and continue providing comprehensive support to all Southington Public Schools employees. Guided by the values of efficiency, responsiveness, and collaboration, the department worked to streamline processes, expand access to resources, and incorporate employee feedback into continuous improvement.

Human Resource Information Systems

Frontline Solution: Central

a. Employee profiles were reviewed and updated to include certification and training records with expiration dates, supervisor assignments, and role-specific information. These updates ensure data accuracy and facilitate compliance tracking.
b. End-of-year letters for paraeducators, ABAs, and ML tutors, and assignment letters for certified staff, were completed and distributed through Frontline Central.
c. The employee database maintained by the human resource office was cross-referenced with Frontline Central to ensure alignment. Reports can now be generated in real time, providing accurate and accessible staffing data. Until position control is fully implemented through LINQ, vacancy tracking will continue through the internal database.
d. Onboarding and offboarding forms are now completed and stored in Frontline Central, giving district departments immediate access to employee documentation and improving workflow efficiency.
e. Mandated annual trainings were assigned to all staff and verified for completion before the start of the 2024-2025 school year. Completion reports confirmed district-wide compliance with State of Connecticut requirements.

Frontline User Training

Southington Public Schools was again selected to host the statewide Frontline User Training on October 23, 2024. This full-day session welcomed 65 participants from surrounding districts and four Frontline representatives. The event offered valuable opportunities to network and explore expanded functionality within Frontline Solutions.

Alio/LINQ: Position Control

Position control is a key HRIS feature that organizes the workforce by position rather than individual employee, establishing a structured framework for job roles and attributes. This provides a stable view of the district's organizational structure, supporting accurate budgeting, staffing management, and long-term planning.

Through the district's existing business management software (LINQ), training on position control began during 2024-2025 and will continue into 2025-2026. Implementation requires close coordination between the technology, payroll, and human resources departments to ensure seamless integration.

Superintendent's Annual Report 2024-2025 – Human Resources Department

Hiring and Retention

The Southington Public Schools Hiring Procedures document was comprehensively updated to reflect current practice, including recruitment timelines, interview protocols, and orientation processes.

A new hire survey was developed and distributed to all newly hired employees to gather feedback on onboarding, training, and workplace culture. Feedback collected 4-6 weeks post-hire informs departmental goals and strengthens retention by identifying areas where additional support is needed.

To meet the state's employment verification requirements, the district partnered with Exposure, creators of Hired CT, in August 2024. This system automates the state-mandated employment verification and background check process, transforming a time-consuming, paper-based process into a secure, paperless workflow that requires minimal staff time.

Job Description Review

In collaboration with administrators and department leaders, the human resource department updated and presented 27 job descriptions for review and approval. This process ensures alignment between position expectations and district needs. The review process will continue throughout 2025-2026.

Terms of Employment

All non-union employees are provided with Terms of Employment upon hire. These documents were updated to reflect legislative changes to the Connecticut Paid Sick Leave law, which now includes public school district employees.

Southington Public Schools Employee Handbook

The Employee Handbook, initially scheduled for distribution in October 2024, was extended to October 2025 to incorporate legislative updates related to Connecticut Paid Sick Leave, FMLA (federal and state), Connecticut Paid Leave, minimum wage adjustments, and new or revised personnel policies.

The handbook includes comprehensive information on topics such as Equal Opportunity and Diversity, Non-Discrimination, Conflict of Interest, Employee Relationships, Workplace Safety, Workplace Guidelines, Leaves of Absence, Benefits, and FMLA. Each employee will receive a digital copy and be asked to sign an acknowledgment of receipt.

Bargaining Unit Negotiations

The human resource department participated in the successful negotiation processes for the following collective bargaining agreements:

1. SEA Certified Staff
2. UPSEU Paraeducators, ABAs, and ML Tutors

Training and Networking

Professional learning and networking remain central to departmental growth. During 2024-2025, the human resource department and select staff participated in a range of training and professional events, including:

1. Legal Updates: School Law (August 2024)
2. Custodial Training (October 2024, for all custodians, presented bythe human resources manager)
3. Frontline Education Solutions (October 2024)
4. Connecticut Association of School Personnel Administrators (October 2024, March 2025, May 2025)
5. Connecticut Association of School Business Officials (February 2025)
6. Connecticut's Municipal Employees Retirement System Presentation (February 2025)
7. Legal Update for the Public Sector 2023 (May 2025)
8. Frontline Central: Program Software (ongoing throughout the year)
9. Alio/LINQ: Two training sessions (continuing in 2025-2026)
10. Dementia Friendly Community Event

Health & Wellness Program

The Southington Health and Wellness Committee expanded this year to include representatives from elementary, middle, and high school levels. The committee focused on scheduling wellness opportunities that aligned with staff availability after the school day.

Offerings included walking challenges, stress-relief sessions, yoga and goat yoga, pickleball, kickboxing, chair massages, healthy eating initiatives, and Zumba. These programs support employee well-being and foster a positive, connected work environment.

Ongoing Work

The human resource department remains committed to serving all employees through efficiency, transparency, and collaboration. By leveraging technology, expanding professional learning, and actively listening to employee feedback, the department will continue to strengthen systems and resources that support every employee of Southington Public Schools.

PUPIL PERSONNEL SERVICES

Amy Aresco, Interim Director of Pupil Personnel Services

The leadership team continues to work collaboratively to ensure staffing and services meet the needs of students and their families, while examining all facets of the district to improve efficiency. Areas of focus for the Special Education Department for the 2024-2025 school year were:

District Program Development:

The Pupil Personnel Services leadership team continued to focus efforts on providing high-quality in-district programming for students with more intensive educational needs who might otherwise be outplaced. The department continued to work on and refine programming needs throughout the year based on the growing, changing student population in Southington. Program expansion was an ongoing focus and is summarized as follows.

- The Specialized Learning Center (SLC) is a self-contained program that is designed to serve students district-wide who have been identified as having autism spectrum disorders. In its five years of existence, SLC at Hatton Elementary School has grown from one classroom serving seven students in grades K-2 to three classrooms serving 33 students in grades K-5. A fourth SLC classroom is planned at JFK Middle School for the 25-26 school year to expand the continuum of intensive programming for students with autism at that level. SLC continues to maintain and enhance its ability to deliver high-quality programming for students with autism. Following consultation with CREC during its formative years and ongoing as the SLC program has expanded, the SLC program uses the Colorado Department of Education Autism Program Quality Indicators to assess programming and set goals for improvement.
- The Comprehensive Learning Center (CLC) at Hatton Elementary School has once again expanded to meet the needs of students with significant developmental delays. As enrollment grows from 11 to 17 students, a second classroom will open for SY 25-26 to continue providing high-quality, intensive supports and services to our students with significant and multiple disabilities.
- Comprehensive Learning Center (CLC), located at JFK, was also identified by the leadership team as needing to expand to provide additional services for the growing population of learners who require greater structure and support due to significant developmental delays and challenges. This program continues to fluctuate based on student need and will be receiving the first group of students from the SLC program this fall.
- The Comprehensive Learning Center (CLC) at Southington High School continues to offer students robust opportunities to build the functional skills they will need for life beyond high school. Students participate in community-based learning experiences—such as visits to Dollar Tree—to practice essential skills, including budgeting, communication, and appropriate social interactions.
- STELLAR, located in Southington, CT at 51 North Main Street, is the district's community-based transitional program designed for students with various developmental disabilities. The program will relocate to a new space that remains in the heart of the

community, offering our students access to updated technology and a storefront where they can practice job skills on-site. Additionally, this spring, the program was selected by the Connecticut State Department of Education as a pilot district for Transition Site Visits.

- The Therapeutic Learning Center (TLC) at Southington High School has embraced the opportunity to partner with both the school and the broader local community. Students have volunteered at Bread for Life and participated in various community outings to build meaningful connections. The program allows students to access elective courses at Southington High School while receiving academic instruction in a supportive environment that meets their social-emotional needs.
- The TLC at the Elementary level will undergo some changes for SY 25-26, going from three classrooms across two schools to two classrooms in one school. The consolidation of the TLC program to one school will serve many purposes and is primarily motivated by the benefits afforded to the students of TLC given their social and emotional needs, giving students the ability to maintain their social connections throughout all of their elementary years in the same school.

Assistive Technology:

The department continued to use an inventory database this school year to track and monitor district-provided student devices.

State and Federal Compliance:

The Pupil Personnel Services (PPS) Department maintained compliance with the federal Individuals with Disabilities Education Improvement Act (IDEA) and its implementing regulations, as well as the Connecticut State Statutes and Regulations for Special Education.

Community and Parent Partnerships:

Continuing collaboration with parents, community stakeholders, and local/state agencies is essential to ensure that students with disabilities have choices and opportunities in the community and the Southington school district. Those partnerships included Southington Parks and Recreation programs, the Community Mental Health Stakeholders Committee, the Student Attendance and Truancy Committee, Southington's Town-wide Effort to Promote Success (STEPS), the Southington YMCA, the Southington Early Childhood Collaborative, and Southington Youth Services. PPS staff also met with the Southington Commission on Disabilities to partner on communication of all-abilities activities in and around Southington.

Special Education Department Work:

The Director of Pupil Personnel Services engaged in professional development and learning through monthly meetings with the Farmington Valley Directors and the Connecticut Council of Administrators of Special Education (ConnCASE). The updates provided to districts from the state were valuable in providing ongoing support and direction to the department and to Southington Public Schools in special education.

Southington hosted visitors from South Carolina to tour our continuum of services within our district programs.
In partnership with the Director of School Counseling, the Coordinators developed District Data protocols and tracking to inform programming and student needs.

Early Childhood and Special Education:

The Wrinn Center at Hatton Elementary School and Strong Elementary School - Integrated Preschool Program continued to meet the special education needs of the district's youngest learners and to provide high-quality preschool activities to all students, including community peer models. Preschool classroom schedules are designed to provide meaningful opportunities for purposeful play for students and ensure that special education services for preschool-aged children are provided. The preschool is in the process of reviewing and revising its curriculum and is preparing for a change in the tool used to assess and report the Early Childhood Outcomes to the Connecticut State Department of Education. The preschool is in its second year of using a testing team to conduct initial evaluations. The testing team model has worked well to enhance assessment and inform multidisciplinary developmental evaluations. The preschool team is preparing for the anticipated revisions to the Early Learning and Development Standards (ELDS) and the Connecticut Documentation and Observation for Teaching System (CTDOTS). Lastly, SY 25-26 will bring additional change to the preschool, with the relocation of one preschool classroom from Hatton Elementary School to Strong Elementary School, leaving two preschool classrooms at HES and four at SES. The Family Resource Center of Southington (FRC) is entering its second year at its new location at Southington High School. It remains a valuable resource for families and their preschool-aged children.

School Readiness and Prevention:

The Preschool Program continued to be successful in meeting the needs of the district's youngest learners, with increased levels of school psychologist support and an on-site preschool facilitator. The Family Resource Center (FRC) and the partnership with Birth-to-Three agencies continued to provide support and resources for the youngest students and their families. The Integrated Preschool Program expanded to include a PK5 classroom to meet the special education needs of children who do not turn five before the new kindergarten eligibility age. The superintendent of schools is utilizing the preschool program as an option for parents whose child is not provided early kindergarten entry, if desired for community peer placement, at no cost.

District-Wide Structured Literacy Team:

A team of special education teachers and coordinators from across the district, with a strong background in structured literacy, worked together to develop guidance documents for selecting the appropriate structured literacy intervention for students with dyslexia or a specific learning disability in reading. The team will continue to focus on alignment between grades/schools,

revising the district's comprehensive reading evaluation criteria, and identifying areas requiring professional development.

Elementary School Level:

During the 2024-2025 school year, the special education teachers at the elementary level (K-2) had the opportunity to participate in workshops focused on the district's new Tier 1 reading curriculum. Having previously received professional development on the Science of Reading, the new program directly builds on their knowledge of structured literacy and the importance of early reading intervention.

Middle School Level:

The CLC program at J. F. Kennedy Middle School and the TLC program at J. A. DePaolo Middle School provided structure and resources for students with significant developmental delays and significant social/emotional challenges.

The three district programs at the Middle School level - Reading Academy, CLC, and TLC all continue to grow in support of students. Both CLC and TLC have increased in student population, and a new school psychologist has joined the TLC team. In addition to the District-Wide Committee for Structured Literacy, the Middle School specialized instructors in both Structured Literacy and Reading Strategies met several times this school year to align practices at the two schools, not only in anticipation of the new schedule but to maximize practices and resources for identified students. The middle school teams also worked to create a planning sheet to support Grade 5 teams with transition planning.

High School Level:

The Pupil Personnel Services (PPS) Department has continued to plan professional development focused on strengthening assessment capacity, aligning state standards with goals and objectives, increasing rigor in resource classrooms, and maximizing resources to meet students' needs. To ensure consistent practices across the department, the special education team developed a checklist for case managers at the beginning of the year. In addition, a Transition Subcommittee was established to create a protocol for administering transition assessments. This work produced a clear timeline for when assessments should be conducted to maintain compliance with State Transition Standards.

In collaboration with the Southington High School team, the PPS Department has also refined its programming and services to support students better. The Comprehensive Learning Center (CLC) and Therapeutic Learning Center (TLC) continue to provide structured environments and targeted resources for students with significant developmental delays and those with substantial social-emotional needs. Both programs now feature a Wellness course, taught by a physical education teacher, which integrates health and physical education content tailored to students' individual needs.

TECHNOLOGY DEPARTMENT

Jessica Poon, Information Systems Manager
Tyer Savage, Network Manager
Rebecca Savelkoul, Digital Learning Coordinator

Goals

The Technology Department set the following goals to maximize the district's investment in technology:

- Increase network dependability.
- Strengthen data security for staff and students.
- Improve departmental and district system efficiencies.
- Build awareness and capacity to use the district's current technology effectively.
- Expand the knowledge base of all Technology Department staff to support the district.
- Evaluate the effectiveness of technology tools by asking:
    - Does this tool increase teacher efficiency, freeing them to focus on impactful teaching and learning?
    - Does this tool create deeper learning opportunities for students, expanding access to information and connections that would not otherwise be possible?

Network and Hardware

Infrastructure

During the 2024-2025 school year, the district continued to upgrade infrastructure, including access points, servers, switches, and firewalls. These investments have improved the network's safety, reliability, and performance.

Devices

The district implemented a consistent replacement cycle for student and staff devices to ensure both productivity and security. This included deploying 1,000 Chromebooks and 200 Windows devices.

Classroom Hardware

The replacement plan for staff projection devices remains ongoing, with more than 100 ViewSonic interactive displays deployed this year to ensure consistent classroom access. The department completed 6,997 support tickets to keep day-to-day operations running smoothly. Additionally, three computer labs (65 computers) at Southington High School were refreshed to provide students with access to specialized, industry-specific technologies not available on Chromebooks.

Security

The district enhanced and upgraded its cloud infrastructure to remain in compliance with cybersecurity insurance requirements while improving service performance. Multiple cloud security enhancements were implemented to safeguard staff and student data.
Outdated camera systems at the middle schools were replaced with new server hardware, allowing for higher-quality video and greater reliability to ensure security issues could be reviewed effectively.

Athletics Website
The Technology Department created a new Athletics site for the high school and both middle schools using the Athletics Manager feature and CIAC sync. This allows the district to end contracts with outside vendors while ensuring ADA compliance. The department redesigned other areas of the website to give them a more modern look.

Systems Integration

PowerSchool
Regular PowerSchool updates provided new features that help teachers and administrators manage daily information efficiently. Many instructional tools use PowerSchool data to generate rosters and accounts, and the department added new reports and data syncs to maintain alignment with external vendors.

Maia Learning
As part of the district's transition from Naviance to Maia, approximately 16 years of historical data were successfully migrated.

Accountability Index
To improve the accuracy of district accountability data reported to the state, the department worked with the Directors of Counseling and Curriculum & Instruction to add verification steps and ensure all high school courses were coded correctly.

SmartPass
To reduce lost instructional time, the district implemented an electronic pass system at both middle schools and the high school. SmartPass provides insight into time out of class, patterns of student behavior, and has contributed to fewer behavior issues.

Middle School Scheduling
In partnership with Middle School Administration and the Department of Curriculum & Instruction, the Technology Department played a key role in designing and testing a new middle school schedule. The team assisted with mock builds, troubleshooting, and final deployment for the 2025–2026 school year.

Professional Development

The Technology Department led professional development for administrative assistants, equipping them with essential technology skills to manage school offices. Central Office leaders also contributed updates, creating a unique opportunity for collaboration, sharing best practices, and implementing new tools more effectively.

Generative AI was another primary focus. Training began with responsible and ethical use, then expanded to exploring its impact on professional practice. The next phase will guide staff on introducing AI to students, exploring its role in learning, and evaluating its impact on instruction.

Instructional Enhancements

Student Help Desk

The department partnered with Southington High School to launch a Student Help Desk Internship, providing students interested in STEM careers with authentic field experience. Interns support technology needs while developing their own technical skills.

Applications

Collaboration with the Office of Curriculum & Instruction continues to ensure high-quality teaching and learning through cloud-based programs such as ClassLink, Canvas, Google Classroom, SmartPass, and ParentSquare. Additional applications—including Benchmark, Amplify, i-Ready, and CommonLit—support targeted curricular areas.

Technology Celebrations

Cross-department collaboration continues to expand with Human Resources, Operations, Curriculum & Instruction, Pupil Personnel Services, and Food Service. Technology plays a vital role in increasing efficiency across the district. Examples include:

- Deployment of improved LINQ purchasing software.
- Creation of a data dashboard to monitor at-risk students.
- Integration of HR tracking and notifications in Frontline Central.

The department also secured multiple grants, including E-Rate and a state Pegpetia grant. These funds supported the staff and student device replacement cycle, enhanced classroom audio/visual equipment with ViewSonic interactive displays, and refreshed aging network hardware.

Technology Ongoing Work

The Technology Leadership Team recognizes the critical role of technology in supporting classroom learning. The department remains committed to collaborating with district leadership and staff to identify needs that promote teaching and learning, while balancing financial responsibility with rapidly advancing technological demands.

Southington High School

Richard Aroian, Principal

Enhancements

Connection of Career Pathways and credit-bearing internship opportunities: A key focus was the continued refinement of our Career Pathways program. Continued efforts were made to align the Program of Studies, Career Fair, Freshman Orientation, and the Course Fair with our Pathways program, which provided a clear visual representation of the post-graduation experience for students. The high school received a grant-funded Career Pathways Liaison position to support its student-centered focus further. Mrs. Teresa Brooks, our Business teacher and DECA advisor, took the position and last year saw significant structural progress. SHS held a community event to encourage local businesses to participate in our internship program. Mrs. Brooks also presented to the FCS, Business, and Technology Education Advisory programs to explain and promote the expansion of our internship opportunities. The SHS new student record platform, Maia Learning, has been implemented and will be used to collaborate with community organizations on student internship opportunities.

Expansion of Dual Enrollment Opportunities: SHS was awarded the Dual Credit Expansion Grant (ARPA), which facilitated the expansion of Early College Experience (ECE) offerings. This grant enabled an increase in dual enrollment opportunities through enhanced partnerships with the University of Bridgeport, Central Connecticut State University, Goodwin University, and the CT Community Colleges. Many departments expanded their ECE and elective offerings, reflecting a broader range of dual enrollment and certification opportunities for students. Five teachers attended AP training this summer. Six teachers applied to the Connecticut University system to act as ECE instructors. Expanded ECE Enrollment

593 ECE enrollments for UCONN- last year, SHS had 18% of our student population take a UCONN ECE course. That is an unprecedented number.

SHS also had 142 students enrolled in an ECE course through the University of Bridgeport.

Every opportunity for students to earn college credits during their years at Southington High School is a win for everyone.

Technology Upgrades: In line with the commitment to a 21st-century vision, dozens of ViewSonic interactive displays were installed in classrooms. After this summer, 100% of classrooms will be equipped with these advanced screens, which offer brighter, clearer visuals than the previous Smart Boards at a lower cost. We have also installed a new system of televised announcements. Televisions were purchased and installed in both cafeterias, the Media Center, the Main Office, the Ninth Grade Academy, and the Student Support Center to ensure that students were aware of the multifaceted offerings at SHS.

This comprehensive set of initiatives highlights Southington High School's dedication to enhancing educational experiences, student engagement, and technological integration.

SHS has also added a series of televisions around the building to spread the word of upcoming announcements and celebrations, and to increase student engagement.

Standardized Grading Procedures: During the 2024-25 school year, all departments successfully aligned themselves to a 70/30 grading system. All assessments are now labeled "Performance Assessments," and they account for 70% of a student's grade. All other assignments are considered "Learning Activities" and make up 30% of a student's grade. The SHS School Improvement Committee decided on this course of action to create consistency across departments. The committee also spent a considerable part of the year analyzing the impact of that change.

The English Department is refining the use of CommonLit suite of assessments throughout the year to measure student reading ability. The Science Department uses NGSS data to analyze its effectiveness, and the World Language Department uses the State Standards of Biliteracy to measure proficiency. The Math Department utilizes the College Board SAT prep assessments for the same purpose.

Celebrations

Shining Knights – A new student-of-the-month program was unveiled!

Certificate of Global Engagement: The Connecticut Department of Education announced that Southington High School is qualified to present the Certificate of Global Engagement to students. The conditions of this certificate acknowledge students who have completed three years of coursework in a world language, four additional credits in courses of a global nature, and three years of extracurricular activities with an international focus. Students must also submit an action project to address a global problem. The global project requirement closely resembles the Citizenship in Action project, implemented six years ago. As graduates of a comprehensive high school, many students will now be eligible for this recognition.

Music: In typical fashion, the marching band had an outstanding fall season with the 2024 production entitled "Puppet Masters." After taking first place at several local competitions, the BKMB placed 5th at MetLife Stadium at the 2024 National Competition to round out their fantastic season. Shortly after that season concluded, both the Winter Color Guard won week after week and took first place at the MAC (Musical Arts Conference) Championships! JV for the second year in a row, and Varsity for the third year in a row!
Orchestra, Chorus, and Chamber Singers also presented several excellent concert performances throughout the year. Each group worked hard to present a variety of challenging and fun music. Chamber Singers visited the Hartt School of Music for the Hartt Choral Festival, where they received much praise after their performance. The students enjoyed the experience and look forward to this opportunity again in future years.
And finally, the SHS Jazz ensemble had an outstanding year of performances. Their year culminated at the National Jazz Festival in Philadelphia, PA, back in March. They had the opportunity to perform for some of the top jazz musicians of the era and received very high accolades from each judge.

Additionally, 15 students were selected for the Southern Regional Festival in January following an initial musical audition. Of those students, three were selected after another audition to participate in the Connecticut All-State Festival.

Athletics: Our newly renovated Lady Knights' softball field made its debut this year as the team reached the state semi-finals under a new coaching staff. Our baseball team also made the state semi-finals. Our Girls' Basketball team advanced to the CIAC state finals before losing. Individually, Lilly Cooper was celebrated as she became the all-time leading scorer in SHS history (boys or girls). Our Boys and Girls Track teams were each crowned CCC South Champions!

A new SHS Girls' Golf Team will make its debut as an official CIAC sport in the spring of 2026!

KAREN SMITH ACADEMY

Jess Levin, Director

Administrator's Executive Summary

The Karen Smith Academy had nine seniors graduate with their Southington High School diplomas. KSA successfully shifted to a block schedule, and both students and staff realized the benefits. Continued collaborative work with the Southington High School administrative team streamlined and perfected the student transition process for students referred to KSA and for students returning to SHS from the Karen Smith Academy. Preliminary discussions were held between DES Administration and KSA Administration about restarting the partnership between the two schools. The goal would be for KSA students to volunteer and help support students in some capacity during their school day.

KSA will continue to develop the work study program. In partnership with the SPS technology department, students built Chromebook towers for student use in the district. KSA will continue to focus on this initiative and develop more multifaceted projects that benefit schools and help students earn extra credits in areas where they are deficient or struggling. KSA will continue its partnership with Good Guys Auto in Southington, offering internships for credit to students interested in careers in automotive and mechanics.

Chinese was added to the KSA curriculum in the 2024-2025 school year with successful results and will continue to be offered in the 2025-2026 school year. KSA added a sewing club as an enrichment option during the FLEX block. Student participation was strong, and KSA will continue with the sewing club in the 2025-2026 school year.

Southington Community Services provided KSA students with two unique opportunities during the school year. The first was the chance to shop for Prom attire at the Southington Congregational Church. It was a fantastic event. The second was a chance for KSA students to shop for Prom fashion accessories and shoes. A makeup expert was also present to demonstrate and offer advice. Both events exemplified the positive relationships and connections that exist between the Southington Public Schools and the Southington Community. Youth Services also played a role in making these events possible.

KSA brought back the cherished tradition of the Thanksgiving Luncheon at the Plantsville Congregational Church, which is run by KSA students and parents. This tradition will be continued in the 2025-2026 school year.

JOSEPH A. DEPAOLO MIDDLE SCHOOL

Chris Palmieri, Principal

Broad-Based Enhancements

DePaolo further integrated technology into the curriculum across all subjects by using the district's online learning platform, Canvas. ParentSquare was again used as the primary communication platform between the school and families. The math progress-monitoring program iReady was used this school year as well. CommonLit was utilized for English Language Arts progress monitoring. Students also utilized a new digital pass system, SmartPass. SmartPass helps hold students accountable, simplifies classroom management, and provides administrators with actionable data.

In response to the latest research on the Science of Reading, language arts teachers in grades 6, 7, and 8 at DePaolo piloted one unit of the CommonLit 360 Curriculum. This pilot included rich, engaging, grade-appropriate complex texts, in-class discussions, vocabulary activities, and evidence-based writing and grammar lessons. Our goal is to support deeper thinking, stronger communication skills, and a love of reading.

We spent the year exploring new options for the middle school schedule to increase instructional time in Language Arts, Math, Science, and Social Studies. This included professional development and curriculum rewriting for all curricular areas.

DePaolo implemented Southington's updated System for Educator Evaluation & Support. This is aligned with the Connecticut Guidelines for Educator and Leader Evaluation and Support (2023) and is designed to foster reflective practice through ongoing, job-embedded professional learning. The plan allows for differentiation across various educator roles, reduces procedural burdens, and emphasizes high-leverage goals that impact student growth. It prioritizes best practices that support the whole child—academically, socially, emotionally, and physically—while fostering professional agency through collaborative goal setting. Feedback within the system is intended to be specific, timely, actionable, and directly connected to meaningful professional learning opportunities.

DePaolo applied for a grant and was awarded it, in collaboration with Arts for Learning Connecticut's proposal to bring "Express Yourself," featuring multiple diverse Teaching Artists, to our students. This grant enabled all students in our school to participate in at least 2 creative, curricular-aligned workshops led by Arts for Learning Connecticut Teaching Artists. These workshops offered a breadth of artistic modalities to our students. They will experience new art forms and create their own original work in them.

Celebrations

DePaolo recognizes students in numerous ways. Aside from each team selecting a "Student of the Month," they also offer a variety of positive reinforcements for all students throughout the year. "Patriot Pride In Practice" is another way to recognize students for their positive behavior. Teachers nominate students who exceed expectations in numerous areas, according to behavioral norms established by "Patriot Pride." In addition, DePaolo hosted Principals' Breakfasts six times this year, during which

families were invited to hear teachers share words of praise. Staff Shining Stars continued this year to recognize staff who go above and beyond to assist their professional colleagues.

The DePaolo Girls' Softball Team celebrated an undefeated season. A banner recognizing this accomplishment will be added to the school gymnasium.

DePaolo held several fundraisers and themed events throughout the year. Over 200 DePaolo Students volunteered at the school booth at the Apple Harvest Festival to raise funds for Pediatric Cancer research. Students raised approximately $14,000 over the two weekends of the Festival, which was donated to Alex's Lemonade Stand Foundation. Students also volunteered to ring the bell for the Salvation Army during the holiday season at one of our local grocery stores. Unity Day, held on October 16, 2024, brought the school community together to show unity for kindness, acceptance, and inclusion, and to send a visible message that no child should ever experience bullying. A toiletry drive was conducted in November, and all items were donated to the Veterans' home in Rocky Hill. DePaolo's annual pajama day fundraiser to benefit Connecticut Children's Medical Center's cancer unit took place in December. DePaolo partnered with Southington Community Services for the first time in December to hold a holiday toy drive. Over 150 toys were donated. DePaolo was also well represented at the YMCA Camp Sloper annual Sloper Plunge. The school community organized a challenge in May to collect cereal boxes to support Southington Community Services.

Aside from traditional concerts offered by music students, members of the band, chorus, and orchestra performed at several community events. DePaolo (in partnership with Kennedy Middle School) also produced the Broadway musical "The Addams Family" in April.

Seventh- and eighth-grade students were inducted into the National Junior Honor Society in December, and DePaolo recognized 88 students at the eighth-grade annual awards night in June.

The third annual "Poetry and Prose" evening was held in June.

In June, a class day and a class night for 8th-grade students were held to celebrate their three years in middle school.

One of DePaolo's paraeducators, Shari Baillargeon, was named the district Paraeducator of the Year. The announcement was made in June and was met with great excitement from the DePaolo community. Shari is recognized not only for her dedication to supporting students academically and emotionally, but also for the positive relationships she builds with staff and students. We are proud to celebrate her well-deserved recognition and grateful for the daily impact she makes at DePaolo.

Ongoing Work

Social Justice work continued this year. DePaolo's lobby display was updated. After polling all DePaolo students, flags were purchased to represent the countries of origin of all current students. DePaolo also celebrated many different families at a "Taste of Culture" event held in February. The PTO sponsored a program for all students.

Emotional Intelligence activities were offered throughout the school year. Aside from implementing RULER strategies outlined by the Yale Center for Emotional Intelligence, teachers also found ways to

support their students' emotional well-being. Research has shown that healthy emotional regulation has an impact of less stress, better health, and positive relationships. DePaolo continued to offer Advisory lessons to all students. Advisory teachers and groups remain the same year to year to foster strong relationships. The lesson topics included team building, gratitude toward others, bullying prevention, goal setting, life skills and career exploration, communication, and further development of their emotional vocabulary to support the Emotional Intelligence initiative.

Over 200 students were involved in DePaolo's Leadership Program. After being trained in communication, team-building, and leadership, all students were selected from a variety of clubs and activities in the school and in the community. Some of the community activities included DePaolo students volunteering at Zion Nursery School, the Calendar House, and Hatton Elementary School. The Animal Helpers added to their responsibilities by maintaining a new chicken coop funded by grants from the Main Street Foundation and the Southington Education Foundation.

Additional academic support was offered every day during the school day, allowing students to receive support from various teachers. This time, called CORE (Creative Opportunities for Reinforcement and Enrichment), was used to strengthen student learning, especially in our Language Arts and Math curricula.

Teachers across academic subjects dedicated time and effort to strengthening instructional practices by incorporating Building Thinking Classrooms strategies into their lessons. While this approach was first designed to deepen mathematical understanding and engagement, our staff recognized its potential to promote critical thinking, problem-solving, and collaboration across all content areas. As a result, departments such as social studies have adapted these techniques to fit their curriculum, reporting increased student participation, richer classroom discussions, and stronger connections between content and real-world application. The flexibility of Building Thinking Classrooms has encouraged both students and teachers to take more risks, embrace productive struggle, and value the learning process.

DePaolo science teachers fully transitioned to the state-adopted OpenSciEd curriculum during the 2024–25 school year, with every grade now implementing four units. Grade 6 teachers introduced four brand-new units after receiving targeted training the prior year, while Grade 8 teachers added two new units to the two they had already been teaching. Grade 7 teachers focused on refining and strengthening their instruction of the four existing OpenSciEd units. To support this transition, all necessary kits were ordered to ensure teachers could fully complete the labs in each unit.

JOHN F. KENNEDY MIDDLE SCHOOL

Susanne Vitcavage, Principal

Enhancements

In September, the year began with a revamped Eagle Excellence program. Students who demonstrated **Engagement** ("I am an active learner. I participate in class discussions and activities."), **Ambition** ("I actively take on challenges. I push myself to grow as a learner."), **Grit** ("I keep on going, even when it is difficult. I look for solutions to problems."), **Leadership** ("I step up when others need help. I take the lead and work to find solutions.") and **Empathy** ("I am kind and considerate to others. I understand the impact of my words and actions on others.") were recognized with Kennedy Ka$h. Once again, in addition to JFK families and local businesses, Dairy Queen of Southington and Mike Defeo of Coke Northeast were generous partners with JFK and provided incentives for students who earned Kennedy Ka$h. All donations were recognized with a note of appreciation and posted on the JFK Instagram page.

Throughout the year, teachers and students embraced the introduction and use of AI. In almost every classroom, AI was embedded into instructional practice.

Unified Sports at JFK continues to thrive! In November, the Unified Sports Leadership Summit, sponsored by the CIAC, commenced the year's festivities. Continued grant funding from CAS and Southington Unico allowed for practices and competitions during the winter season.

SPS Lt. Brian Leppard and STEPS Prevention Coordinator, Mrs. Megan Albanese, spoke to all students about making safe decisions online when using their phones and devices. They also discussed the impact social media has on students' emotional well-being.

In November, members of NJHS and STEPS supported the Brian O'Connell Homeless Project by making "Brian Bags" that hold essential supplies kept in a car for distribution to homeless members of our community. Over 200 "Brian Bags" were made. While most of the essential supplies were provided by community donors, JFK students donated individual packs of tuna for each "Brian Bag." Students and staff each took "Brian Bags" to distribute to those in need along their travels.

In December, JFK secured a coveted stop on Valentine the Clown's Toy Express. All month long, students collected and donated over 400 toys that Valentine distributed throughout our local and surrounding communities.

Throughout the school year, JFK recognized prominent influencers from Connecticut and beyond during Hispanic Heritage Month (October), Black History Month (February), Women's History Month (March), and Asian American and Pacific Islander Month (May).

During February, Manny Noguiera, a BMX rider, demonstrated some amazing tricks while speaking with students about pursuing their dreams and treating others with respect. Students and staff really enjoyed his performance.

Beginning in February, many activities for our incoming 6th-grade class commenced. From an evening orientation to school counselor visits to a team-building activity at Camp Sloper and tours during the school year and summer, incoming students were well informed about the upcoming middle school transition. Similar activities were held for our 8th graders as they prepared for high school.

In collaboration with the Food Services Department, students were able to taste test and vote on a proposed new item to be introduced during the 25-26 school year. The students were enthusiastic to try the grilled cheese sandwich. The votes were in favor of the new item!

Students participated in field trips to Meigs Point Nature Center (grade 7), Newport and Fort Adams, Norwalk Maritime Museum and Aquarium (grade 8), and an on-site Mad Scientist experience at JFK (grade 6). Thank you to the PTO for helping fund these trips.

In collaboration with Southington Public Library's Teen Librarian, Jasmine Cedeno, and former Southington Teen Librarian, Nicole Kent, JFK/JAD Media Specialist, Mr. Chris Carvalho, presented at the Connecticut Library Association's annual conference on the success of the school's Library Leaders program. The presentation discussed the work that Library Leaders do and the joint programming efforts between the schools and the Southington Public Library. Other local libraries have started their own programs modeled after Southington's.

In May, several JFK students attended the annual Manufacturer ConneCTion Fair at the State Capitol. JFK parent and State Representative Chris Poulos also met with the students. Students were able to meet with local manufacturers to learn about manufacturing-related education and careers.

A favorite activity each June is the Special Olympics Torch Run that passes by JFK. The band performed and hundreds of students cheered our SPD police officers as they ran by JFK.

Celebrations

The annual Open House was well attended and set the stage for a bright school year.

In September, JFK students participated in Southington's *Operation Stay Warm*, donating coats, hats, gloves and scarves for those in need within our greater community.

Thirteen 6th graders were recognized at a Board of Education meeting in early September in recognition of their science inventions and participation in either the Connecticut Invention Convention or Connecticut Science and Engineering Fair held earlier in the spring. One student, Aria Drake, earned an invitation to represent Connecticut at the National Invention Convention in June 2025 for her invention, *Flare*.

In October, students collected various pet supplies in support of the Animal Hospital of Berlin after it sustained a building fire. Over 130 items were donated.

The band and Colorguard represented JFK at the annual Apple Harvest parade. Runners on JFK's cross-country team also participated in the Apple Harvest race.

Eighth grader Dominick Milewski's essay, "What Does Freedom Mean to Me," written in the spring, received top accolades in a state essay competition.

Once again, 8th-grade students participated in *Grit and Wit*, an inclusive, growth mindset team-building competition. This event is always a popular one and sets the tone for a positive eighth-grade experience.

Students were encouraged to wear orange on Unity Day, a day dedicated to spreading the word about bullying prevention while promoting kindness, acceptance, and inclusion. JFK students were also in attendance at Southington's Annual Red Ribbon Rally.

The volleyball team raised over $1700 for the Sideout Foundation. The Sideout Foundation was started in 2006 and helps people living with Stage 4 metastatic breast cancer. The foundation fundraises and also conducts research and actively seeks treatments.

In November, 6th grader Christiano Almeida, Connecticut's Kid Governor, participated in a statewide bus tour to promote the Kid Governor program and shared stories about his experience. Christiano also shared his story with his 6th-grade peers in late November.

Our local veterans, Wayne White, Dave Brennan, Lou Urso, and (JFK parent and Board of Education member) Jasper Williams, shared their stories of active-duty service to our country with all students. The annual Veterans' Day concert and celebration was a success. Once again, JFK students invited veterans they knew to attend this appreciation event as their guests. The VFW also invited local veterans. A table of honor highlighting family members of JFK staff who are veterans was proudly displayed in the main hallway. The JFK band, orchestra, and chorus performed, and a reception was held in the media center following the ceremony. Mr. Ryan Hartt, JFK social studies teacher whose brother is a veteran, emceed this special event.

The Eagle Engineers, JFK's FIRST Robotics team, advanced to the state finals! The team demonstrated determination, problem-solving skills, and the ability to overcome obstacles at the FIRST Lego League competition in late November. They also took home the Core Values award.

In December, our choral, orchestra, and band concerts were well attended and set the tone for a season of holiday spirit. Festive entertainment and themes during the Twelve Days of Holiday Fun (morning jingles, festive sock day, ugly sweater day, etc.) brightened the school days leading up to the holiday break.

JFK students raised $730 for CCMC during its annual PJ Day for Kids event. For a $1.00 donation, students wore their PJs to school. In keeping with the theme of helping others, Flannel Fridays for a Cause were held during the winter months. Again, for a $1.00 donation, students could wear PJs on Fridays. Over $ 1,500 was collected and dispersed to several other local organizations, including Southington Community Services, Bread for Life, Youth Services, Southington's Food Pantry, and the Prudence Crandall Center, among others.

In December, the Eagle Engineers placed third at the state finals competition. Their hard work, determination, and problem-solving skills paid off. There were over 140 First Lego League teams in the stat,e and only the top 50 were at the finals.

In January, Reverend Sharon Holt and the First Baptist Church of Southington honored eighth grader Ekamjot Singh as the recipient of the church's Martin Luther King, Jr. Award. Ekam was selected as the recipient because he embodies the spirit of Dr. Martin Luther King, Jr. through his kindness and commitment to fostering understanding and unity.

Deputy Fire Chief Glenn Dube presented his annual lesson on heat transfer to sixth graders and reviewed important, lifesaving safety skills for the event of a fire.

Sixth grader Andhadveer Singh's essay submission to Senator Christopher Murphy's Martin Luther King, Jr. Day Essay Contest was awarded first place for the 1st Congressional District! Andhadveer was formally recognized by Senator Murphy's staff at a breakfast in May.

In late January, in preparation for *Random Acts of Kindness Week* in February, 6th graders decorated hot coffee cozies with messages of kindness and community care, which were donated to a local business to inspire and brighten the days of members of the Southington community.

During a February Advisory lesson, students created Valentine cards that were distributed to local nursing homes. JFK's STEPS club posted positive, uplifting messages on classroom doors and student lockers during *Random Acts of Kindness Week*.

JFK staff members Mrs. Bove, Mr. Roarty, Miss Leblanc, Mrs. Stone, and Mr. Rossi braved the elements and plunged into Sloper Pond during the Sloper Plunge. JFK raised over $ 1,000, exceeding their $500 goal, for the Sloper Plunge.

In March, Noah Phillips, Anthony Baldino, and Emily Nord were the top three champions during JFK's annual Geography Bee.

Five talented musicians represented JFK at the Southern Regional Music Festival.

In conjunction with Calendar House, the annual Intergenerational Dance was held in March. The theme was a spring hoedown. This collaborative event brought many senior citizens and NJHS members together for an afternoon of dancing, pizza, and fun. It was inspiring to witness younger and older generations connect and forge relationships.

Miss Katie Soltys was surprised and honored to receive a Fund for Teachers fellowship grant in April! The Fund for Teachers awards grants to educators to support their professional growth. Miss Soltys, a two-time Fund for Teachers grant recipient, was one of 62 Connecticut teachers awarded grants. She travelled to South Africa to collect data and monitor the effects of human impact on the environment during the summer of 2025.

In May, sixth- and seventh-graders enjoyed a visit from Rob (Gottfried), the Drummer. Rob shared his "Be the BEST you can BE!" theme with students, providing positive self-esteem-building messages.

Through a bi-weekly coffee cart fundraiser, students in JFK's CLC (Comprehensive Learning Center) and SLC (Social Learning Center) programs raised funds to visit various local businesses as part of their adaptive living curriculum in the spring.

JJ Auletta, Ayah Alhidami, and Norah Beauchemin were recognized as recipients of the 2025 Americanism Essay contest, sponsored by the American Legion Women's Auxiliary. The topic was, "What does America the Beautiful mean to me?"

Ongoing Work

Implementing a new schedule will be at the forefront of the 25-26 school year. With an increase of time in the academic periods (known as Core), professional development will continue to plan for the increased academic learning time.

The Advisory program, and the development of a schoolwide charter at the beginning of the school year will continue to set the tone for a respectful, positive school climate. Students will participate in monthly Advisory lessons designed to foster growth in academic, vocational, and social-emotional learning.

Maintaining a safe school environment remains a top priority at JFK. A safe school environment ensures all students feel comfortable, respected, and ready to learn. This means respecting differences and making sure everyone feels included. Teachers, staff, and students will work together to support each other. When everyone follows the rules and treats others with kindness, school becomes a place where people can focus on learning, growing, and feeling safe.

In addition to maintaining a safe physical and emotional school environment, Digital Citizenship and Online Safety will be a continued focus. In addition to Lt. Leppard's presentation on cyberbullying prevention and respectful online behavior, teachers will continue to model and inform students how to use technology responsibly and safely, including AI.

DERYNOSKI ELEMENTARY SCHOOL

Sarah Williams, Principal

Derynoski School Accomplishments

The 2024–2025 school year at Walter A. Derynoski Elementary School was characterized by growth, innovation, and connection. It was a year filled with joyful learning, strengthened family-school partnerships, and a continued focus on both academic excellence and social-emotional development. Through the adoption of new curricula, data-driven instruction, and inclusive community events, the Derynoski staff collaborated to offer students a rich, engaging, and supportive educational experience. The school community frequently united to celebrate achievements, build relationships, and foster a strong sense of belonging. Weekly newsletters sent each Friday at 4pm to families established consistency in communication

Throughout the year, the PTO organized monthly Family Fun Nights, bringing families together for activities like movie nights, bingo, and other fun events. These popular evenings strengthened the strong community spirit at Derynoski. Besides evening events, students participated in monthly all-school celebrations during school hours, including craft-making, trivia, movie screenings, and a festive beach day. These activities provided opportunities for students and staff to connect and celebrate as a community. They quickly became a monthly favorite, creating joyful moments and boosting school pride.

A key highlight this year was Derynoski's third annual One School, One Book initiative, featuring the beloved title *Escape from Mr. Lemoncello's Library*. This shared literacy experience promoted reading at home and strengthened the home-school connection. Students followed along with the story through family read-alouds and video recordings created by volunteer DES staff readers. In partnership with the newly opened Southington Public Library, all classrooms visited the facility as part of the project. Grades K–2 participated in a themed read-aloud and scavenger hunt, while grades 3–5 tackled an exciting escape room activity inspired by the book. To show appreciation for the library's collaboration, Derynoski and the PTO donated a collection of board games for their youth programming space.

In academic settings, teachers continued to apply evidence-based instructional practices aligned with the Science of Reading. Grades K–2 successfully adopted the Benchmark Advance literacy curriculum, which emphasizes structured phonics and systematic reading development. Teachers enhanced their understanding of the DIBELS Assessment, using data to guide small-group instruction and address individual student needs effectively. Across all grades, instruction remained responsive, data-driven, and grounded in best practices that foster literacy growth.

Social-emotional learning (SEL) remained a priority, with continued implementation of the RULER Program. Classrooms created individual charters to establish shared emotional norms and foster safe, supportive learning environments. The counseling and PE staff supported weekly

SEL practices through themed wellness days—Mindfulness Mondays, Tranquil Tuesdays, and Wellness Wednesdays—which promoted well-being for both students and staff. The school's safety procedures were reviewed and updated in collaboration with first responders, who participated in fire, lockdown, and secure school drills and provided feedback for improvement.

Positive behavior was consistently reinforced through Derynoski's "Dragon Hugs" initiative, where students earned recognition for demonstrating respectful, responsible, and kind behavior. These acknowledgments came with incentives that further motivated students and reinforced a positive school culture.

The Derynoski PTO continued to be an integral part of school life, providing generous funding for field trips, Scholastic News subscriptions for all students, recess equipment, books, and classroom materials. Their volunteer efforts supported numerous school events, and their monthly staff recognition program offered meaningful appreciation to educators throughout the year. Due to successful fundraising, the PTO expanded resources and opportunities for both staff and students.

Celebrations and Diversity

Derynoski's commitment to inclusion, kindness, and cultural awareness was evident through numerous events and initiatives held throughout the year. In honor of Veterans Day, fifth-grade students led a heartfelt ceremony in the auditorium, which ended with each class participating in the "White Table" tradition, honoring veterans sacrifices.

Students across the school engaged in a variety of service projects that benefited the broader community. Derynoski sponsored YMCA scholarships, provided summer camp support for families in need, and contributed to a strong Polar Plunge team, raising money to ensure Southington students have a chance to attend Camp Sloper. Several students were recognized as "Heroes Among Us" for their outstanding charitable work and community service, including collecting items for veterans, collecting and distributing items for dogs awaiting adoption, and cutting their own hair for donation to make wigs for children in need.

Diversity education continued to be a fundamental part of the school's mission. This year, third and fifth-grade students took part in engaging diversity workshops led by Mr. Paul Vivian and Dr. Audley Donaldson. These sessions provided students with practical tools to understand and value diversity in everyday life. The school's STEPS/Emotional Intelligence and Positive Behavior Programs additionally promoted a safe, inclusive, and respectful environment. The STEPS Leadership Program, consisting of over 30 student leaders, encouraged messages of kindness, responsibility, and acceptance across the school community. Activities in all classrooms were coordinated to align with the goals of the STEPS and RULER programs, fostering a consistent and supportive culture for both students and staff alike.

Library Media Center Report

During the 2024–2025 school year, the Derynoski Library remained a dynamic and essential part of the school community—a place where students were encouraged to explore, inquire, and develop a lasting love of reading. The library continued to maintain a diverse and inclusive collection of literature, ranging from classic tales to contemporary titles. With a wide variety of genres and reading levels available, students were able to find books that sparked their curiosity, whether through the excitement of fantasy, the insight of historical fiction, or the facts of nonfiction texts. This rich selection played a central role in fostering independent reading habits and supporting differentiated learning across the grades.

This year, a major initiative focused on fostering digital citizenship among all students. Using a series of engaging lessons from Common Sense Media, students learned to navigate digital platforms responsibly and respectfully. These lessons led to noticeable improvements in how students approached online behavior and interacted in digital spaces, emphasizing the importance of safety, empathy, and critical thinking in today's interconnected world.

Research and information literacy were also key priorities throughout the year. Recognizing the importance of teaching these skills early, the library media specialist collaborated with classroom teachers to guide students through meaningful research projects aligned with the new Benchmark Advance reading curriculum. Kindergarten students explored nonfiction through research on clownfish, while first graders selected animals of interest to investigate. Second-grade students examined extreme weather and demonstrated their learning by creating typed nonfiction books to share at home. In fourth grade, students researched historical figures and brought their findings to life through a dynamic Living Wax Museum. Fifth graders completed two major research projects. One focused on U.S. landmarks and another on career exploration, which included investigating colleges, tuition costs, and various professions. Throughout these experiences, students learned to evaluate sources, organize information, and communicate their ideas clearly.

Innovation and hands-on learning also thrived in the library this year. Students participated in coding experiences using Dash and Dot robots and enthusiastically took part in the global "Hour of Code" initiative through Code.org. These opportunities fostered creativity, logic, and perseverance, while providing students with foundational skills in computer science. Across all areas, the Derynoski Library remained a space where curiosity was nurtured, skills were sharpened, and students were empowered to grow as learners and digital citizens.

Kindergarten

The kindergarten team successfully implemented the new Benchmark Advance literacy program. Teachers engaged in professional development, collaborated with the school's Literacy Coach, and visited peer classrooms to refine their practice. Data from DIBELS and i-Ready assessments informed small-group instruction and helped build a rigorous learning environment rooted in the Science of Reading. Students made notable progress in phonemic awareness, blending, and decoding skills, evidenced through district assessments.

A continued focus on small-group instruction in both literacy and numeracy supported differentiated learning and targeted intervention. Collaborative learning structures and meaningful discourse helped build a strong academic foundation for each student.

Grade 1

This year marked the first full implementation of Benchmark Advance in first grade. Through its' three components—Foundational Skills, Reading to Build Knowledge, and Writing & Grammar—students engaged in content-rich instruction centered around social studies and science themes. They developed reading comprehension through poetry, fiction, plays, and informational texts, while also building vocabulary and oral language through structured conversations.

Writing instruction included narrative, informational, and opinion genres, with an emphasis on editing and grammar using newly introduced checklists. Grammar was woven into daily lessons and reinforced through writing.

Daily phonics instruction followed a structured scope and sequence. Students engaged in systematic skill practice and applied their knowledge in reading and writing contexts. Phonological assessments helped guide groupings and interventions.

In math, the Ready Math curriculum, supported by i-Ready Pathways, was used for differentiated instruction. Instruction focused on building problem-solving, collaboration, and critical thinking skills.

Grade 2

Second grade continued the momentum with the new Benchmark ELA program. Daily lessons in phonics, close reading, and writing were delivered with fidelity. Students worked with fiction and nonfiction texts, engaged in annotating, and used visual cues to support comprehension. Collaborative conversations and structured writing experiences enabled students to construct paragraphs using main ideas and supporting details in various genres.

Students also engaged in their first formal research writing project during Unit 8, focusing on how wind and water shape Earth’s surface.

Math instruction followed the Workshop Model with differentiated stations and individualized i-Ready pathways. In science, NGSS-aligned learning sequences encouraged inquiry, engineering design, and real-world problem-solving.

Daily morning meetings supported emotional intelligence and social skill development using mentor texts and common language for navigating peer relationships.

Grade 3

The third-grade team embraced innovation and growth this year, welcoming a new colleague and preparing to say farewell to a retiring team member. While completing the final year of Readers' Workshop, teachers also began professional development for Benchmark Advance, reviewing Units 1 and 2 in preparation for next year.

Data-driven instruction was a priority, with DIBELS and i-Ready results used to identify Tier 1 and 2 student needs. Small-group interventions were thoughtfully planned and executed.

In math, the team explored the Building Thinking Classrooms (BTC) model. Students worked in random groups on vertical whiteboards to solve problems and communicate reasoning. This approach increased engagement, collaboration, and confidence. Teachers also refined their use of probing questions and consolidation techniques.

Social-emotional learning was prioritized through the ABC STEPS curriculum, implemented during a dedicated “fifth special.” The program provided consistent, grade-wide instruction in character development and emotional literacy.

NGSS science instruction was enriched with performance tasks and IAB-aligned assessments, reinforcing the 4C’s of collaboration, communication, critical thinking, and creativity.

Family engagement remained a strength, with consistent communication via ParentSquare, Padlets, newsletters, and multimedia updates.

Grade 4

Fourth-grade students engaged daily with Building Thinking Classrooms in math, using vertical whiteboards and random groupings to solve challenging problems. They deepened their understanding of multi-digit multiplication, division, fractions, and decimals while developing confidence through structured discourse and analysis.

Support from the district math specialist enhanced instruction, particularly through modeling, enrichment activities, and small-group interventions.

In literacy, teachers integrated Science of Reading strategies, using DIBELS and Amplify resources to form guided reading groups that addressed decoding, fluency, comprehension, and writing. Instruction during iBlock time focused on constructed responses and self-assessment aligned to learning progressions.

Writing instruction was supplemented with Word Study and Patterns of Power, and students were encouraged to apply writing skills across subjects.

Science instruction emphasized exploration, experimentation, and analysis, with students investigating topics such as biomimicry, energy, and erosion. Social studies included map skills, regional geography, and civics, focusing on the interdependence of natural resources and human systems.

The STEPS SEL curriculum was embedded daily, supported by morning meetings, mood meters, and visual strategy supports in every classroom.

Grade 5

The fifth-grade team participated in sustained professional development on math instruction using Vertical Thinking Boards, which were incorporated into daily lessons. Students worked in collaborative groups to solve open-ended problems, fostering critical thinking and peer discussion.

ELA instruction reflected the final year of Readers' Workshop, with students reading across multiple genres and analyzing texts for theme, cause and effect, and main idea. Progress monitoring through DIBELS and Amplify informed small-group instruction during iBlock. Writing units included narrative, informational, opinion, memoir, and fantasy writing.

Students applied research skills to projects on U.S. landmarks and careers, integrating digital literacy and financial awareness by investigating colleges and tuition. Science instruction followed NGSS guidelines and included inquiry-based learning on space systems and a student-led Invention Convention.

In social studies, students engaged in the Kid Governor program and participated in a field trip to the Old State House. The new STEPS SEL curriculum was implemented through daily morning meetings, supported by Officer Verab's C3 instruction in the fall.

Ongoing Work

During the 2025–2026 school year, teacher professional learning at Derynoski Elementary will continue to deepen and expand. A primary focus will be the implementation of the new Benchmark Advance reading program in grades 3–5, supported by targeted professional development aligned with the Science of Reading. Teachers in kindergarten through second grade will also continue to receive support as they enter their second year of implementation, allowing for continued refinement of instruction and collaboration around best practices.

Professional learning at Derynoski will also continue to grow in the area of mathematics. Teachers in grades three through five will deepen their implementation of Building Thinking Classrooms, a model that promotes problem-solving, collaboration, and active student engagement. This approach encourages students to think critically and work collectively, and it remains a key strategy for strengthening mathematical understanding.

Teachers will also continue to utilize Morning Meeting, a core component of the Responsive Classroom approach, to build strong classroom communities. This daily practice fosters meaningful connections, reinforces emotional safety, and supports the development of social-emotional skills. Staff will also be trained in Restorative Practices to ensure community building that is encompassed by a safe and caring community. We will work on bringing children in to support problem solving and solutions.

Looking ahead, Derynoski remains committed to a continuous improvement model grounded in data-informed decision-making. Instruction will continue to be responsive, differentiated, and aligned to the academic and emotional needs of all students. Above all, Derynoski remains dedicated to fostering a safe, respectful, and inclusive environment—one where kindness, perseverance, and personal responsibility are core values that shape the daily experiences of every student.

FLANDERS ELEMENTARY SCHOOL

Katie T. Guerrette, Principal

School Accomplishments

Flanders Elementary School maintained a safe, supportive, and engaging learning environment where students were encouraged to grow academically and socially. A significant highlight of the year was the 20th Annual Veterans Day Ceremony, which honored local service members and their families through student performances, songs, and poetry. This tradition continues to strengthen the school's connection to the broader community while instilling in students respect and gratitude.

Social-emotional learning remained an essential component of daily instruction. Students utilized the STEPS Asset Building Classroom framework and lessons, along with Morning Meeting and the Mood Meter, to build emotional awareness. At the same time, classroom charters established shared expectations that promoted a positive, inclusive school climate for all students.

The Third Annual Flanders Flash Color Dash successfully combined fitness and community spirit, raising $24,000 for our school PTO. Proceeds supported a wide range of PTO initiatives, including the distribution of spiritwear for all students and staff, cultural enrichment programming, reduced costs for field trips, and family-centered events. In addition, Flanders students and families engaged in community service through initiatives such as the SOUPer Bowl Food Drive for Bread for Life, Pajama Day for the Connecticut Children's Foundation, and the Sloper Plunge benefiting YMCA Camp Sloper. Collectively, these efforts underscored the school's commitment to both academic success and the development of socially responsible citizens.

Celebrations

The eighth annual *One School, One Book* initiative featured *The Wonderful Wizard of Oz* by L. Frank Baum. This schoolwide literacy program fostered strong home-school partnerships and reinforced the importance of family engagement in reading. Families completed assigned chapters together, students participated in trivia challenges, and raffles provided opportunities to win prizes for participating in the schoolwide reading event. A memorable highlight was the transformation of the school into Oz, complete with a yellow brick road and classroom visits from Dorothy and her friends.

The PTO continued to play a vital role in enhancing the educational experience. This year's cultural arts programs included an assembly with professional BMX rider Mannie Nogueira, who emphasized perseverance and goal-setting while demonstrating his skills. In addition, musician Michelle Urban engaged students in interactive performances that combined music, movement, and lessons on neurodiversity, promoting greater understanding and inclusivity within the school community.

Kindergarten

Kindergarten students worked on becoming strong readers and writers this school year. Students engaged in phonological awareness activities to build a strong foundation in literacy. An important focus on phonics helped support students in their decoding and encoding skills. They applied this new knowledge to their everyday reading and writing. In math, kindergarteners were challenged during math stations where they learned to add and subtract fluently through five and

build number sense. Students learned to navigate relationships, solve conflicts with their peers throughout the day, and build independence. Students learned to use the mood meter to plot their feelings daily.

Grade 1

First-grade students had a wonderful year of growth. First graders strengthened their decoding and encoding skills. They practiced various phonics skills in isolation and connected texts. Additionally, first graders had the opportunity to write about their reading. Students deepened their understanding of place value and learned various addition and subtraction strategies by practicing word problems and engaging in hands-on learning through math centers. Students had many discussions about emotions and feelings through read-alouds and the use of the Mood Meter. The first graders also had an exciting field trip to the Indian Rock Nature Preserve, where students observed many different animals and their habitats.

Grade 2

Second graders had a busy year, working across disciplines to learn about the world around them. Students analyzed texts, using tools to annotate important parts, keywords, and main ideas. They wrote about what they were reading, making connections to the text, to themselves, and to the world. They used background knowledge to build upon what they already knew and had constructive conversations to share ideas in reading, writing, and math. Our culminating event incorporated writing, reading, art, music, and science in our spring celebration. The students enjoyed the field trip to Camp Sloper as part of the science curriculum, where they learned about different ecosystems. Students enjoyed morning meetings and closing circles to share ideas and to reflect on their day. Those brief moments were often the highlight of their day, having a chance to connect with each other and their teachers to build lasting relationships.

Grade 3

Third graders explored the changing Earth through fossils in the Grand Canyon. They spent a day at the Connecticut Historical Society and Museum learning about the Branches of Government and the legend of the Charter Oak. In literacy, the focus was to foster a love of reading through fiction, character development, and learning to enjoy informational texts. Third graders were empowered to voice their opinions through persuasive writing and were entertained with creative narratives. Math skills were strengthened in multiplication, fractions, and rounding. Overall, third grade was transformative as students gained knowledge in geography, literacy, writing, and mathematics, developing confidence and critical thinking skills for the future.

Grade 4

Fourth-grade students had a wonderful year of school. Students explored our Land and Water Unit, focusing on the Oso Landslide. Students created stream tables to test out their hypothesis and found the cause! Through the Writer's Workshop, students wrote for a variety of purposes in multiple genres, including opinion, informational, and narrative. In Reader's Workshop, students focused on fiction, identifying character traits and how those traits are tried and true. In math, students used a combination of math centers and vertical whiteboards to push their thinking, and they used iReady to support their mathematical needs. Students continued to expand their social-emotional learning through read-alouds, STEPS, and many in-class activities focused on collaboration and teamwork.

Grade 5

Fifth-grade students had a wonderful year. They participated in a variety of enriching learning experiences this year through the CT Kid Governor program, our Annual Colonial America Living Museum, and Early Exploration boat races. Students explored science utilizing the Next Generation Science Standards (NGSS). They worked on problem-solving and entrepreneurship in creative ways through the CT Invention Convention program. Our community is proud to share that one of our students even qualified for the National Level of Invention Convention. Readers' and Writers' Workshop fostered meaningful discussions that expanded their grasp of the ELA curriculum. At the same time, a visit to Lake Compounce added a fun and enriching end to their time at Flanders Elementary School. In math, students used vertical whiteboards to support the research behind Building Thinking Classrooms. Additionally, through the STEPS and C3 programs, students strengthened classroom relationships by practicing empathy, problem-solving, and learning to be upstanders.

Ongoing Work and School Improvement

Flanders Elementary upheld its dedication to continuous improvement by relying on data-informed practices in both academics and social-emotional learning. Instruction was intentionally designed to align with student needs, ensuring equitable access to meaningful learning opportunities. Targeted small-group and differentiated instruction in language arts and mathematics continued to yield strong results, reinforcing its value as a central strategy for meeting diverse learner needs.

The effective implementation of the Benchmark Advanced curriculum in Kindergarten through Grade 2 was met with notable success, as demonstrated by strong student performance data. In Grades 3–5, integrating Building Thinking Classrooms into mathematics further enriched instruction by fostering collaboration, critical thinking, and problem-solving through small-group discourse. The literacy and math coaches were instrumental in supporting the rollout of the new curriculum and utilizing best practices.

Equally important, Flanders sustained its focus on cultivating a safe, respectful, and positive learning environment, where kindness and perseverance were consistently reinforced as essential values for student growth and success.

WILLIAM H. HATTON ELEMENTARY SCHOOL

Robert Garry, Principal

School Information

Hatton Elementary School remained committed to excellence in teaching and learning this year. The school theme was "Reach for the Stars," encouraging students and teachers to set ambitious personal learning goals and create action plans to achieve them. Our Opening Day festivities featured a space theme, with costumed staff, students, and families joining the fun. A DJ kept the music going, and every class was announced as they entered the building on the red carpet to the cheers of families and staff. Starting each year off on this positive note is a great way to connect with our families and contribute to our positive school climate. The "Reach for the Stars" theme remained alive all year as teachers worked with their students to set goals, monitor learning progress, and take small steps to drive positive change. Regular goal-setting conferences also increased students' ownership of their learning.

The past year provided our staff with rich professional learning experiences in both reading and math instruction. All teachers and administrators participated in year-long professional development with reading and numeracy specialists to enhance our understanding of new content and provide us with tools and strategies for delivering focused feedback. Our teachers benefited from onsite coaching to model new strategies and help enhance teaching practices. Teachers also partnered with our curriculum specialists to closely examine student data and develop instructional groups in and across classrooms. Professional development, modeling, and coaching helped enhance our teachers' math and reading practices, leading to positive growth in our student achievement data across all grades. Student engagement and collaboration also increased through the use of vertical whiteboards in all classrooms, and random partnerships increased opportunities for our students to share their understanding with all peers. The results across all grade levels were excellent, and we plan to build on these strengths in the year to come.

The Hatton staff maintains a focus on total involvement and continuous improvement. Teachers are members of one or more teams that focus on school improvement, data teams, SRBI/MTSS, and School Climate, and our membership includes both teachers and support staff. The Hatton SRBI team met regularly to review student achievement data and assist teachers in providing both intervention and acceleration for their students. Students received tiered instruction based on their individual needs and benefited from support in and out of the classroom. Our intervention work is a team effort that engages teachers and intervention staff in regular data analysis and a close partnership with families so they can provide additional support at home. In addition to encouraging teacher leadership, Hatton students were engaged in leadership development opportunities through the STEPS team and leadership assemblies, and participation with CT Association of Schools Leadership and Celebration of the Arts Conferences. The Hatton staff remains dedicated to supporting town initiatives, including STEPS and the annual YMCA Polar Plunge, and our entire school community rallied behind students and staff members affected by challenging medical diagnoses.

One of Hatton's core strengths is the amazing school community. The Hatton PTO continued to support all students through enrichment activities, cultural arts programs, and a variety of family night events, including book fairs, arts enrichment programs, bingo night, pizza cooking nights with the principal, monthly movie nights, and an ice cream social. The PTO supported literacy across the school by purchasing classroom libraries and keeping the book vending machine in our media center stocked with high-interest books for our students. The book vending machine remains a powerful incentive to recognize our students' positive efforts each week. The PTO also purchased flexible seating for all classrooms, books for classroom libraries, and brand-new Hatton School-branded banners and signs for our school-wide events. This dedicated group of parents continues to look for ways to improve the school experience for every student at Hatton. Regular connections and communication with families are an integral part of the work at Hatton. Families are engaged as partners in each student's learning, and are provided opportunities to enhance student learning at home.

Celebrations

A highlight of this school year was the continuation of our One School, One Book project, coordinated with our PTO. A copy of Finding Gobi was provided for every family, and a school-wide reveal was planned in advance of the project rollout. The roll-out celebration included a school-wide read-aloud in our gymnasium with one of our favorite former teachers (Mrs. Frederick). Nightly activities included virtual staff and local celebrity readers, trivia contests, in-school activities in all classrooms, and a cultural arts project day for all classes aligned with the book's theme. We wrapped up this fun project with a virtual visit with the author and his dog, Gobi. While the Hatton Community benefited from this work, the project is also shared with other elementary schools as they, too, work to incorporate a one school - one book activity into their schools.

The Hatton Friday Phone Call was once again a favorite highlight for students and families. The school principal held a weekly phone call with families right in the classroom to celebrate the success of an individual student. Students are recognized with tangible rewards, including a special gold coin that allows them to purchase their own book from the Book Vending Machine in our library. Friday Phone Calls served as an excellent motivator for the students and remained a meaningful way to recognize and reinforce positive contributions to the school community. A highlight of this year's calls was the addition of celebrity callers from our town. School and community leaders were invited to make the calls with the principal, and they, too, shared positive comments with each family. The continued positive impact of these calls has significantly reduced discipline issues and has improved our school culture. This practice has also been shared successfully with other Southington schools. Over 700 calls were made this year, delighting Hatton families.

Pre-School

Our preschool expanded to include a new 5-year-old class for the students who were not eligible for kindergarten due to a change in school start age. Students across all three age groups (3's, 4's, and 5's) engaged in hands-on exploration activities on a variety of themes, including fire safety, pumpkins, friendship, weather, and bugs. In the Fall, students had a special visit from the Southington Fire Department, where they had the opportunity to explore the inside of a fire

truck! This year, students learned many new songs, engaged in a variety of learning opportunities to learn colors, shapes, numbers, and letters, and most importantly, learned how to demonstrate kindness to new friends. The year ended with a Moving Up Ceremony for the four-year-olds, and the five-year-olds celebrated their transition to kindergarten with a graduation ceremony.

Kindergarten

The kindergarten classes took two engaging and informative field trips this year, one in the Fall to Indian Rock Reserve and another in May to The Bushnell in Hartford to see The Hungry Caterpillar. Students learned about the orchards and how apples grow. They also learned how to make apple cider and even tried it! The hayride, as always, was the highlight of this trip. Students enjoyed learning about characters in The Hungry Caterpillar and proper nutrition. This was a wonderful way to promote Reader's Theatre and see the characters come to life. The year concluded with students performing in a Flag Day and Graduation Program for their families. These performances helped students with their speaking and listening skills. Kindergarten students also participated in a school-wide Field Day celebration, during which they worked on team-building skills, with families in attendance. The school-wide APEX challenge was also a highlight that brought families and the Hatton community together.

Grade 1

This was another outstanding year for our first-grade learners. In math, the First-Grade team worked with the math specialists to refine practices and differentiate for students. The teachers began using vertical whiteboards to support student discourse, collaboration, problem-solving, and sharing of thinking. In literacy, all classrooms began using Benchmark Advanced, which was a huge shift from the Units of Study. With support from the literacy team and ongoing collaboration among grade-level teams, all teachers successfully implemented Benchmark Advanced. Through this work, our students became stronger readers and writers. In science, all four classes were able to incubate eggs to hatch chickens in the Spring. It was highly engaging for the classes to see the process, from candling the eggs to monitor development through to hatching. The chicks' development and rapid changes over two weeks prompted significant observations and discussion with the students. The First-Grade team went on a field trip to the CCSU planetarium. Students learned all about constellations and celestial bodies. This correlated with both the science and ELA units. It was an exciting adventure that connected to our learning. Each classroom also worked hard to build classroom community by developing students' Emotional Intelligence, creating a class charter, and using the mood meter daily. Additionally, the implementation of STEPS lessons supported students' social-emotional development. Finally, each classroom held a variety of celebrations throughout the year to bring families in and share their students' academic work and skills, including the annual First Grade play.

Grade 2

This year, second-grade students implemented Benchmark Advanced for ELA. This is a comprehensive, research-based English Language Arts program designed to support all students, including ELL students, in achieving grade-level reading and writing proficiency through explicit instruction, differentiated activities, and consistent assessment. The program aligns with the Science of Reading. Teachers attended many professional development days to familiarize themselves with the new resources. In math, teachers continued to cross-cohort during I-block to

meet the needs of specific learners. This practice has resulted in an increase in our overall math scores on the iReady assessment. The grade 2 classes were among the highest achieving groups across all our schools. Finally, we took a field trip to Beardsley Zoo, where we learned about various animal habitats. This aligned with our first unit in reading.

Grade 3

Third-grade students created maps of Connecticut to show their mastery of map skills. Students also learned about Connecticut's government and economy. In science, students worked on inquiry-based units on fossils, forces, and earth science, culminating in a unit in which they watched caterpillars transform into butterflies. To further students' understanding of fossils, the grade level went on a field trip to Dinosaur State Park. Students also worked on writing narrative stories, informational writing, and creating effective opinion pieces. In math, students deepened their understanding of basic computation and tackled new concepts such as multiplication, division, basic algebra, area, perimeter, and measurement. Student learning was enhanced by increased peer discourse when sharing learning at the vertical whiteboards. Finally, in reading, students worked to improve their responses to various texts across all areas, and teachers incorporated close reads to boost comprehension skills. The grade three students showed flexibility, adaptivity, and perseverance as they grew as learners.

Grade 4

Fourth-grade students embraced a year filled with rich learning opportunities and personal growth. Each morning began with the Responsive Classroom model, starting our day with greetings, shares, activities, and meaningful conversations that strengthened emotional intelligence. These practices helped students build strong relationships and fostered a positive classroom community. In literacy, students immersed themselves in the American Revolution through reading and research across multiple texts. The unit culminated in a lively debate between Loyalists and Patriots, where students demonstrated both knowledge and critical thinking. Beyond this unit, they engaged in meaningful "grand conversations" during read-alouds, including Tiger Rising, during which they even practiced whittling like one of the main characters. Social studies began with map skills, where students showcased creativity by designing their own treasure maps. Through peer feedback and a gallery walk, they learned to celebrate and critique each other's work. These skills extended into studying the regions of the United States, where students continued to apply their map knowledge.

This year, fourth graders also benefited from SEF funding to launch "Postcrossing," a hands-on global learning project that allowed students to send and receive postcards from around the world. They also contributed to the broader community by leading initiatives such as the Souper Bowl food drive and a military drive to support soldiers overseas. In mathematics, students deepened their learning through I-Ready and math workshop structures. The introduction of vertical whiteboards encouraged collaboration, problem-solving, and increased engagement across the grade level. Students also enjoyed two memorable field trips. At Camp Sloper, they explored erosion as part of their science curriculum. At the Connecticut Science Center, they experienced hands-on exhibits and a 3D film on extreme weather, tying directly into their fall reading unit. Overall, fourth-grade students thrived academically, socially, and emotionally this year, developing skills and experiences that will serve them well as they move forward in their educational journey.

Grade 5

Grade 5 students participated in the new STEPS curriculum throughout the year to help create a sense of community and belonging in our classrooms and across our school. Students completed ten weeks of C3 (an extension of our STEPs work focused on personal growth and an understanding of our community) with SPD Officer Bradle. Students were also eager to participate in middle school transition days; Asset Day at Camp Sloper and a tour of DePaolo/JFK. In the classrooms, Reptile Day, Kid Governor elections, fantasy projects, and curricular-based room transformations were just three examples of project-based learning, STEM activities, and the arts. In addition, grade five students were STEPS leaders and Unified Sports coaches. Students were also kindergarten P.E. helpers and worked with first-grade reading buddies throughout the year. Our students participated in multiple concerts this year, including chorus, band, and orchestra. Classes began the year with a field trip to Old Sturbridge Village, which included a day of exciting, hands-on learning. The grade five students enjoyed traditional year-end celebrations as they transitioned to the middle school as sixth graders. This was a meaningful culminating activity for the students and their families.

Urbin T. Kelley Elementary School

Marilyn Kahl, Principal

Enhancements

During the 2024–2025 school year, Kelley School continued to strengthen instructional practices and student learning through several key initiatives. In grades K–2, the Benchmark Advance English Language Arts Curriculum was implemented, providing a comprehensive and consistent approach to reading and writing instruction. In grades 3–5, teachers expanded their use of *Building Thinking Classrooms* practices in mathematics to promote deeper engagement, collaboration, and problem-solving. Instruction and assessment across all grade levels continued to reflect the principles of the Science of Reading, ensuring a strong foundation for literacy development. Numerous professional development workshops supported these initiatives, providing teachers with opportunities to refine their practice, collaborate with colleagues, and improve student outcomes. Kelley School also prioritized fostering an inclusive school culture. Third and fifth-grade students participated in diversity workshops facilitated by Mr. Paul Vivian and Dr. Reverend Audley Donaldson. These interactive sessions addressed important topics such as stereotypes, bullying, acceptance, and diversity, giving students meaningful opportunities for reflection and dialogue.

Celebrations

The Kelley School Parent Teacher Organization (PTO) provided exceptional support to students, staff, and families. In addition to funding field trips and cultural enrichment activities, the PTO purchased new headphones for every student, supplied books for classroom libraries, and contributed to the Grade 5 trip to Camp Sloper. The PTO also sponsored several community-building events, including the Welcome Back Picnic, Scholastic Book Fairs, Holiday Fair, Egg Drop, and Field Day. Student opportunities were further enhanced through sponsorship of the KES Kindness Club and Art Club. The KES Drama Club proudly presented *Seussical Jr.* in February, featuring over 30 talented cast members from grades three through five. Fifth Grade STEPS Ambassadors once again demonstrated exemplary leadership by serving as role models for younger students. Ambassadors led monthly Town Meetings, highlighting the "Asset of the Month" and encouraging students to apply these positive traits in daily life. They also organized service projects, including the Thanksgiving Food Drive benefiting Bread for Life and the annual "Soup-er Bowl" collection supporting Southington Community Services.

The Kelley School Unified Sports Team continued to provide students of all abilities with the chance to participate in athletics and experience success. Guided by dedicated staff volunteers, the program included eight weeks of practices and culminated in an Olympic-style event in collaboration with Derynoski School's Unified Sports Team. This initiative fostered teamwork, empathy, and school pride for all involved.

A highlight of the school year was the Veterans Day Program and Parade, a cherished tradition honoring Kelley School family and friends who have served in the military. In addition to the in-school program and parade, families organized a donation drive that provided numerous boxes of health and hygiene items to the Veterans Center in Rocky Hill.

Ongoing Work

This year also marked significant growth in staff learning around Multi-Tiered Systems of Support (MTSS) as a framework for addressing both academic and behavioral needs. Through professional learning and collaborative planning, teachers refined their use of data to guide instruction, intervention, and enrichment. This shift supports a proactive, structured approach to tiered interventions, ensuring that all students receive the support they need to thrive. Looking ahead, a continued focus on MTSS during the 2025–2026 school year will strengthen alignment across classroom instruction, small-group interventions, and schoolwide practices.

Grade-Level Highlights

Kindergarten

Our youngest learners benefited from a balance of structured play, center-based instruction, and the new Benchmark Advance program. Teachers continued professional learning in the Science of Reading (SOR), with emphasis on writing and phonics, and used decodable texts to support explicit instruction. Collaboration among teachers deepened their knowledge of SOR practices, leading to significant gains in reading. In mathematics, students worked daily in their individualized iReady Pathways. Science learning was enriched by a fall field trip to Indian Rock Nature Preserve and a spring visit from Curious Creatures.

First Grade

ELA instruction centered on Benchmark Advance, integrating phonics, reading, and writing through thematic units on life cycles, character traits, communities, technology, and the solar system. Ready Classroom Mathematics supported differentiated instruction, with students completing weekly personalized lessons through "My Path." Math centers and data-driven support from math specialists ensured targeted instruction. The year concluded with the annual Mother's Day program, a trip to the Beardsley Zoo, and the hatching of chicks as part of a science study.

Second Grade

Teachers successfully launched Benchmark Advance with support from literacy coach Jamie Lowell, implementing a comprehensive approach to reading and writing. Literacy progress was closely monitored using DIBELS and unit assessments. Math instruction included differentiated centers, weekly iReady lessons, and fluency development through Fluency Flight. I-Block time allowed for targeted support in reading, writing, and math. Science units emphasized engineering-based problem solving, including hands-on explorations such as *The Koa Tree*, *The 4th Little Pig*, and *Beavers*.

Third Grade
Third grade implemented *Building Thinking Classrooms* with professional learning, book studies, and collaboration with the math specialist. Vertical whiteboards and randomized groups fostered problem-solving, collaboration, and respectful academic discussion. While rooted in mathematics, these strategies extended across content areas, strengthening communication and critical thinking skills for all learners.

Fourth Grade
Students further developed collaboration and problem-solving skills through *Building Thinking Classrooms*. In reading, they explored characterization, theme, and perspective, while writing instruction emphasized narrative, opinion, and informational essays on topics including weather events and the American Revolution. Science instruction featured hands-on explorations of erosion at Camp Sloper and biomimicry at the Peabody Museum. Social Studies culminated in a creative state float project highlighting U.S. regions.

Fifth Grade
Fifth grade implemented a fully departmentalized model, providing specialized instruction, varied teaching styles, and purposeful movement breaks. The *Building Thinking Classrooms* approach was applied in both math and ELA, fostering engagement and critical thinking. Student innovation was highlighted in the Invention Convention and the inaugural Living Museum, complemented by a field trip to Boston's Freedom Trail. Social-emotional learning was supported through the C3 program with the Southington Police Department and the district's STEPS initiative. Targeted academic support during iBlock ensured that all students received interventions tailored to their needs.

ZAYA A. OSHANA ELEMENTARY SCHOOL

Josephine Rogala, Principal

Zaya A. Oshana Elementary School had a successful 2024–2025 school year, marked by a strong focus on professional development, academic growth, and family engagement. Through a collaborative approach, our Multi-Tiered Systems of Support (MTSS) strengthened tiered responses in reading, math, and behavior. In contrast, ongoing training in literacy and math fostered a proactive and professional school climate. In partnership with the district literacy team, K–2 teachers implemented the new Benchmark Advance curriculum, while grades 3–5 explored innovative strategies using the Building Thinking Classrooms framework. The Oshana PTO enhanced school-community connections by sponsoring numerous events, including the annual Ice Cream Kickoff Social, Halloween Family Night, Bingo and Movie Nights, Scholastic Book Fairs, Holiday Bazaar, author visit, and the OES Talent Show.

Additionally, a PTO sponsored school fundraiser supported the upgrading and enhancement of our school gardens. Monthly PTO meetings and STEPS school assemblies highlighted developmental assets and emotional intelligence. Students thrived in enrichment opportunities, including the Frozen Jr. drama production to sold-out audiences, the Robotics Club, the Math Olympiads, and the annual Art Show, which proudly showcased creative works from Kindergarten through fifth grade.

Kindergarten

Students engaged in multi-disciplinary learning throughout the school year. Examples included a field trip to Indian Rock Nature Preserve, observations of plant and animal life cycles, investigations of sinking and floating through shipbuilding in science, and pumpkin- and apple-themed curriculum-based learning stations. Parent engagement activities were held throughout the school year, including Friday Mystery Readers, parent-led learning stations, blanket-making for Southington Community Services, and curriculum-centered events. Teachers engaged in ongoing professional development with literacy coaches as they learned and implemented the new literacy curriculum, Benchmark Advance.

Grade 1

First-grade students engaged in multiple hands-on investigative learning activities, including observing shadows to determine shifting patterns of the sun, studying life cycles and hatching baby chicks, filling a pumpkin with trash and burying it, only to dig it up on Earth Day to see what happened. First graders also engaged with diverse books, learning about different holiday traditions; created sound makers to study how vibrations create sound; and made a field guide showing how animals adapt to changing seasons. First graders also attended a field trip to the CT Science Center in the spring to enhance their learning within the science curriculum. Teachers participated in ongoing professional development and coaching cycles with the literacy coach as they learned and implemented the new literacy curriculum, Benchmark Advance.

Grade 2

Second-grade students explored Southington's history and welcomed a special visit from the Barnes Museum. They researched animals and created digital posters using PosterMyWall during media skills lessons; discovered the interdependence between plants and animals through a hands-on field trip to Camp Sloper; and planted vegetables and fruits in the school garden in collaboration with LEAF and Mark Ramsey. Parents were invited into classrooms throughout March as Mystery Readers and participated in various special events during the year. Teachers engaged in ongoing professional development with the literacy coach as they implemented the new Benchmark Advance curriculum.

Grade 3

Teachers engaged in ongoing professional development focused on Building Thinking Classrooms strategies and collaborated with math specialists through coaching cycles to implement vertical whiteboards with students. Third graders participated in diversity lessons led by consultants Mr. Paul Vivian and Rev. Dr. Audley Donaldson, celebrating the uniqueness of each family. Students also explored extreme weather, collaboratively researching and designing protective models for the school. Additional projects included researching animals, creating digital slide shows to present to peers, and observing the life cycle of butterflies. During a field trip to the Indian Rock Nature Preserve, students learned about the lives and traditions of indigenous people.

Grade 4

Fourth-grade students participated in a science field trip to Camp Sloper in the fall to study erosion. While learning about the American Revolution, students selected significant events and wrote and published essays to demonstrate their understanding. Teachers engaged in ongoing professional development focused on Building Thinking Classrooms strategies, collaborating with math coaches to implement vertical whiteboards in their instruction. Students also took part in enrichment opportunities, including a project to launch a school store, where they learned key aspects of starting and managing a business.

Grade 5

Teachers engaged in ongoing professional development focused on Building Thinking Classrooms strategies, collaborating with math coaches to implement vertical whiteboards in instruction. Fifth graders participated in the CT Kid Governor program, with a record number of students developing platforms through research and public speaking, culminating in a schoolwide election to select a representative. Students and teachers also partnered with parents to make blankets for Southington Community Services, visited residents at The Summit during Halloween, and participated in diversity workshops with Paul Vivian and Rev. Dr. Audley

Donaldson. Students showcased innovation in the annual Invention Convention, where two projects received recognition, and one advanced to the national convention scheduled for summer 2026. Fifth graders also deepened their understanding of Early Colonization and the Revolutionary War during a field trip to Newport, Rhode Island. They concluded the year by leading student-led conferences for their parents in the spring.

.

Ongoing Work/School Improvement

During the 2025-2026 school year, grades 3–5 teachers will participate in ongoing professional development to support the implementation of the new literacy curriculum, Benchmark Advance. K–2 teachers will continue deepening their practice in year two of implementation. Our MTSS systems will remain central to supporting early intervention for both academics and behavior. Additionally, Oshana staff will engage in continuous professional learning focused on restorative practices, building capacity around the Vision of a Graduate, and fostering a positive school culture and climate.

SOUTH END ELEMENTARY SCHOOL

Rita Stearns, Principal

Enhancements

The 2024–2025 school year was both busy and rewarding for students and staff at South End Elementary School. Our school community remained deeply committed to fostering a safe and supportive climate for everyone. From day one, we emphasized social and emotional well-being—beginning with a school-wide kickoff assembly and continuing with weekly Shark Shout Outs, which recognized students for acts of kindness and strong character.

Each month, grade-level teams led Town Meetings focused on themes such as relationship-building, goal-setting, respect and responsibility, spreading kindness, and choosing positive role models. Our 5th-grade STEPS ambassadors also played an important leadership role—helping to run meetings and mentor younger students throughout the year. This included launching a Handwriting Club, where 4th and 5th-graders met weekly with younger students to support the development of their letter formation skills. Older students also continued their roles as classroom mentors during both morning and afternoon sessions.

Our students fully embraced this spirit of community, eagerly taking part in CCMC's Pajama Day and contributing to two food drives benefiting Southington Community Services.

Celebrations

The South End PTO continues to make a meaningful impact on both students and staff. In August, they repainted the blacktop, adding fresh markings for outdoor games and basketball, and generously provided each classroom with a brand-new area rug. As part of our annual *One Book, One School* initiative, the PTO purchased a copy of *Escape from Mr. Lemoncello's Library* for every student and staff member to enjoy. Two school-wide viewings of the movie in the cafeteria—complete with popcorn and pillows—served as the culminating event. The PTO also continues to fully fund field trips for every classroom, including both off-campus experiences and in-house programs. This year, students visited destinations like the Connecticut Science Center, Lake Compounce, Roaring Brook Nature Center, and Indian Rock Nature Preserve. The PTO also sponsored engaging assemblies, such as a visit from professional BMX rider Mannie Nogueira, who shared an inspiring message about perseverance and goal-setting, and Engineering Wonder, an exciting program that introduced students to the elements of engineering.

In addition, dedicated parent volunteers run our popular Shark Cart—a mobile prize cart where students redeem their earned Shark Bites for demonstrating positive behavior.

Paul Vivian and Audley Donaldson returned to South End to lead diversity training sessions for our third- and fifth-graders. Their sessions focused on challenging stereotypes, embracing

diversity, standing up to bullying, and fostering inclusion. During Read Across America, our annual SEES Book Swap brought joy to students as hundreds of books found new homes.

March also showcased the talents of our SEES Drama Club with three sold-out performances of *Moana Jr.*, marking our 21st annual production. In May, we celebrated the generous contributions of our parent and grandparent volunteers with a special Volunteer Tea. Teachers provided breakfast items, and students created heartfelt thank-you cards to express their appreciation. That same month, our second graders proudly performed their Patriotic Program for families, local veterans, and active-duty military members. Guided by our music teacher, students sang patriotic songs and shared handmade bookmarks with service members, both past and present.

Kindergarten:

This year, Benchmark Advance, our new ELA curriculum, was rolled out in kindergarten through second grade. Teachers participated in ongoing professional development and collaborated closely with district literacy coaches to strengthen their reading and writing instruction. A continued emphasis on phonics and decodable texts supported our commitment to the Science of Reading, resulting in significant reading growth among our kindergarten students. In math, students participated in hands-on explorations and problem-solving activities through math stations. Small group instruction, supported by our Math Specialist and tutor, provided targeted support to meet individual needs. Additionally, students participated in daily structured play, which helped them develop essential social and emotional skills.

Grade 1

First-grade teachers began their transition to the Benchmark Advance curriculum, working closely with literacy specialists throughout the year. Grounded in the Science of Reading, instruction emphasized decodable texts, particularly through the *Jump Rope Readers* program. In May, students proudly showcased their progress during our second *Jump Rope Reader Celebration*, reading aloud to special guests. The growth our first graders have demonstrated this year has been truly commendable.

In math, instruction was anchored by the *Ready Mathematics* program. Students set personal learning goals and used *My Path* to strengthen foundational skills. Math centers, along with push-in support from our math specialist and tutor, provided additional opportunities for reinforcement. Throughout the year, students also engaged in research-based learning that fostered communication, critical thinking, and collaboration with peers.

First graders enjoyed a variety of engaging experiences this year. Before the holiday break, they participated in the annual reading of *The Polar Express*, cozy in their pajamas. Their learning extended beyond the classroom with a field trip to Indian Rock Nature Preserve and an in-house visit from the Connecticut Science Center. To conclude their science unit on life cycles, students had the exciting opportunity to observe baby chicks hatching right in their classrooms.

Grade 2

Like their peers in kindergarten and first grade, second graders transitioned to the Benchmark Advance ELA curriculum this year. With support from district literacy coaches, teachers emphasized explicit phonics instruction and prioritized small group learning. Writing instruction expanded to include a research project, with students proudly creating and presenting their findings through Google Slides.

Math was a particular area of strength. Students worked on their individualized i-Ready Pathways to reinforce key skills, while the IBlock provided targeted support from both our math specialist and tutor.

Science learning came to life through hands-on experiences, including a traditional trip to Camp Sloper to study animal habitats and a visit to the Roaring Brook Nature Center. Students also participated in the LEAF program once again, working together to plant and care for the school garden.

In May, second graders proudly presented a combined Musical and Historical Assembly honoring veterans, with family members who served as honored guests.

Grade 3

Third graders participated in Readers and Writers Workshops, with continued emphasis on strengthening small group instruction. A highlight for many students was the mystery unit, which tied in perfectly with our *One Book, One School* selection—also a mystery!

In math, students tackled multiplication and division, working toward mastery of facts up to the 12s. They were also introduced to Building Thinking Classrooms, using vertical whiteboards to foster collaboration and deepen their mathematical thinking. This new approach brought energy and excitement to math lessons.

Students enjoyed a visit from Dr. Audley Donaldson and Paul Vivian, who led thoughtful conversations around diversity and embracing differences. The Connecticut Children's Museum also brought history to life through an in-house presentation, enriching the curriculum in an engaging and meaningful way.

Grade 4

Fourth-grade students engaged in the Math Workshop model, incorporating differentiated math centers to reinforce key skills. This year also marked the introduction of *Building Thinking Classrooms*. Students embraced vertical whiteboards, and the level of collaborative conversation and problem-solving was impressive.

In Reader's Workshop, students explored the American Revolution through a cross-curricular lens that integrated reading, writing, and social studies. They researched historical figures and produced a variety of written pieces, including informational texts, personal narratives, and

opinion essays. To complement their science units, students visited the Connecticut Science Center and Camp Sloper, where they investigated erosion firsthand.

Grade 5

The workshop model continued to guide reading and writing instruction, with a strong emphasis on small group instruction throughout the year. *Word Love*, Word Study, and phonics were consistently incorporated—often during the intervention block—to support foundational literacy skills.

The introduction of Building Thinking Classrooms transformed the math experience. It was inspiring to see confident math students thinking aloud and modeling strategies, creating a collaborative environment that supported peer learning. I-Ready My Path remained a valuable self-monitoring tool, helping students progress at their own pace and set meaningful, attainable goals.

Our STEPS Ambassadors continued their volunteer efforts in kindergarten through second grade, providing support in both literacy and numeracy. Many fifth graders also joined our newly created Handwriting Club to assist younger students. All students participated in the Invention Convention, with two advancing to the state level—a testament to their creativity, innovation, and problem-solving skills.

Ongoing Work/School Improvement

South End Elementary School will continue to foster a favorable school climate for all students, staff, and families. In the 2025–2026 school year, Restorative Practices will be a key focus throughout the school community. Teachers in grades 3–5 will begin transitioning to the Benchmark Advance ELA curriculum, with support from district literacy coaches. Our instructional practices, grounded in the Science of Reading, will remain consistent across all grades, emphasizing small-group instruction and explicit phonics instruction. Additionally, we will transition from the current Scientific Research-Based Interventions (SRBI) model to a Multi-Tiered System of Supports (MTSS) to better meet the needs of students requiring tiered interventions.

WILLIAM M. STRONG ELEMENTARY SCHOOL

Melissa Barbuto, Principal

Enhancements

The 2024-2025 school year was another year full of remarkable accomplishments at William M. Strong Elementary School! This year, Strong School continued to focus on cultivating a positive school climate. To foster a positive school climate, which promotes the learning and well-being of the school community, the entire school implemented components of the Responsive Classroom approach, expanded the implementation of Emotional Intelligence to all students and parents, and encouraged a Growth Mindset for all students and staff through monthly whole school activities and presentations led by staff and students. Academic growth and achievement were a focus for all students as well. Intervention support and enrichment were provided in all content areas based on student needs. As a result, students made significant academic and social/emotional growth.

Celebrations

The PTO continued to support the Strong School community through cultural arts programs, enrichment activities, after-school clubs, fundraisers, and family night events. These included book fairs, running club, karate club, yoga club, family movie night, bingo night, an APEX fundraiser, and two cultural arts programs. Throughout the year, the PTO also provided staff with classroom materials and recess equipment. In collaboration with the PTO, Strong School successfully participated in the "One School, One Book" program. One School One Book provided the opportunity for all families at Strong School to experience the same book at the same time, *The Wishing Tree*. It concluded with the school planting their very own "wishing tree".

Work around Emotional Intelligence continued to expand and thrive this year with the implementation of the new STEPS Asset Building Classrooms Program. This program is rooted in STEPS Asset Building Classrooms and has taken shape to combine the emotional intelligence concepts that Southington Public Schools has been practicing in its classrooms. Teachers continued to utilize the Responsive Classroom component "Morning Meeting" as a structure to implement Emotional Intelligence and build a positive school community.

Continued efforts to enhance students' cultural awareness were made. Paul Vivian and Audley Donaldson returned to Strong School to provide third- and fifth-grade students with diversity training. Classroom libraries were expanded to include diverse texts, providing students with books that serve as both lenses and mirrors for themselves and others.

Kindergarten through fifth-grade teachers continued to incorporate key components of the Responsive Classroom Approach in their classrooms to build a positive community. In addition to Morning Meeting, all teachers implemented key elements of Emotional Intelligence through classroom Charters, Mood Meter check-ins, strategy walls, and conflict-resolution lessons, all of which had a positive impact on students' social and emotional growth.

All kindergarten through fifth-grade teachers implemented the Ready Classroom math program in conjunction with MyPath and workshop stations to differentiate instruction. Along with this implementation, all teachers received coaching from the math specialist to deepen their understanding of the math curriculum and math instructional practices. All third through fifth-grade teachers began integrating Building Thinking Classroom practices into their instruction.

All kindergarten through second-grade teachers integrated the new Benchmark Reading Program and all third through fifth-grade teachers began integrating the Science of Reading practices into their instruction.

Staff continued to deepen their understanding and implementation of communication, collaboration, critical thinking, and creativity across all content areas to support Southington Public School's Vision of a Graduate.

Staff focused on individual student growth through the implementation of a multi-tiered system of supports and data-based individualization. Throughout this process, students' progress was closely monitored to ensure they received appropriate interventions and services. Adaptations to each student's individual plan were made as needed, based on an in-depth data analysis.

Ongoing Work

Teacher professional learning will expand during the 2025-2026 school year with the implementation of the new Benchmark reading program for grades three through five. All third through fifth-grade teachers will continue to deepen their understanding of Building Thinking Classroom practices.

As the school continues to work on creating a positive school climate, during the 2025-2026 school year, staff will continue to implement the STEPS Asset Building Classrooms Program. Staff will also begin intentionally implementing restorative practices across the school community to strengthen relationships, build a positive culture, and provide supportive responses to conflict. Staff will engage in professional learning focused on restorative circles, proactive relationship-building strategies, and effective language that fosters accountability and repair. These practices will be integrated into daily classroom routines and into the school's approach to student discipline.

R.E. Thalberg Elementary School

Erin Nattrass, Principal

School Accomplishments

The 2024-25 school year was successful, filled with accomplishments at Thalberg Elementary School. Most significant was the rollout of the Benchmark Advance literacy curriculum in grades K–2. Primary teachers embraced this comprehensive, research-based resource with energy and dedication. Through ongoing professional learning and collaboration, they implemented structured routines, built students' foundational literacy skills, and deepened comprehension through meaningful texts and discussions. The alignment of Benchmark Advance with instructional goals has already had a measurable impact on student growth. Staff looks forward to building on this momentum in the years ahead.

In grades 3–5, teachers focused on transforming mathematics instruction through the *Building Thinking Classrooms* framework. Teachers reimagined their math classrooms as spaces where students engage in problem solving, collaboration, and critical thinking. From vertical non-permanent surfaces to random groupings and rich thinking tasks, our intermediate classrooms were alive with student voice and intellectual risk-taking. This shift has fostered deeper understanding, resilience, and a love for math among our students.

Across the building, our professional learning communities have grown stronger. Teachers used data to inform instruction, reflected on practice, and supported one another in implementing new strategies. Regular collaboration with district leaders, instructional coaches, and specialists allowed us to stay focused on instructional priorities and student needs. Academic growth and achievement were a focus for all students. Intervention support was provided in literacy and mathematics based on student needs. Small-group strategy work in the classroom increased performance in language arts and mathematics.

Celebrations

This year's theme, *"Onward and Upward,"* perfectly captured a collective mindset. Growth is a journey, and every challenge is an opportunity to rise. Whether launching new curriculum, embracing innovative practices, or celebrating student progress, Thalberg staff and students approached each step with determination and optimism.

Continued efforts to promote cultural awareness were a focus this year. Paul Vivian and Audley Donaldson returned to Thalberg to provide diversity training to third- and fifth-graders. Students in grades 3 and 5 engaged in lessons on diversity, stereotypes, bullying, and the development of understanding, empathy, and acceptance. They related to students through humor to teach ways to celebrate each student's contributions to Thalberg.

Thalberg celebrated Classroom Charter Champs each month during school assemblies, highlighting a student from each class who best lived the charter. Fifth-grade leaders established a Kindness Club. The focus of the group was to notice random acts of kindness throughout the school, share them each week over the intercom, and have them acknowledged by the Thalberg school community.

The PTO's dedication embodies the spirit of community and continues to strengthen the home-school bond that is essential to our success. From organizing cultural arts events and thoughtful staff appreciation initiatives to funding a rock wall for the gym, field trips, and field day, the PTO's partnership made a meaningful difference in students' and staff's daily experiences.

The PTO sponsored two book fairs, and each classroom benefited from book donations after each event. A PTO subcommittee planned a special Class Day for fifth-grade students, along with a promotion ceremony to commemorate their years at Thalberg School before transitioning to middle school.

Kindergarten

Kindergarten students made tremendous strides this year, supported by the explicit, structured reading instruction provided by the Benchmark Advance curriculum. Teachers engaged in ongoing, collaborative professional learning with the district literacy coach to ensure consistent and high-quality implementation. Alongside academic growth, play-based learning remained a central focus, fostering social development, peer connections, and problem-solving skills. A memorable highlight of the year was the students' first field trip to the Bushnell to see *The Very Hungry Caterpillar*. This enriching experience brought literature to life and created lasting memories.

Grade 1

First-grade students continued to grow as readers through explicit, targeted instruction using the Benchmark Advance curriculum. Teachers used both curriculum-based assessments and DIBELS data to plan purposeful small-group instruction that addressed individual student needs. In math, instruction was differentiated through a blend of whole-group lessons, small-group support, and structured learning centers designed to reinforce key concepts and skills. The year was enriched by hands-on learning experiences, including a field trip to Flamig Farm and an in-house *Curious Critters* program, which complemented the excitement of each class hatching chicks and exploring life cycles up close.

Grade 2

Second-grade students made substantial gains in reading this year through the implementation of the new Benchmark Advance program. Teachers strategically planned small group instruction to address specific areas of need, with a particular focus on strengthening decoding skills. Ongoing collaboration among grade 2 teachers and district literacy coaches helped ensure curriculum planning and consistent, high-fidelity implementation.

To support their science learning, students enjoyed a full day of hands-on exploration at Camp Sloper. In social studies, students deepened their understanding of their local community by taking a memorable "Tour of Southington." This engaging field trip included visits to the new library, The Barnes Museum, Southington's Community Cultural Arts (SoCCA), and the Town Green—topped off with delicious stops at Nona's Pizza and Praline's Ice Cream.

Grade 3

Third-grade students demonstrated continued growth across all academic areas. Targeted small group instruction remained a key strategy for strengthening both decoding and reading comprehension skills. In mathematics, teachers began implementing strategies from the *Building Thinking Classrooms* framework, including the use of vertical whiteboards to encourage student collaboration, critical thinking, and mathematical discourse.

To bring learning to life, students applied their understanding of force and motion during an engaging field trip to the local bowling alley. They also enhanced their social studies learning through a visit to the Connecticut State Capitol, where they explored how our state government functions and how it impacts their lives as citizens.

Grade 4

Fourth-grade students continued to develop as critical thinkers, deepening their ability to ask thoughtful questions, interpret texts beyond their literal meanings, and apply learned skills across subject areas. Teachers enriched instruction by integrating strategies from their *Building Thinking Classrooms* professional learning, including the use of vertical whiteboards to foster mathematical discourse, collaboration, and problem-solving.

To support science learning, students visited the Connecticut Science Center, where they engaged in hands-on exploration and inquiry aligned with key science curriculum concepts.

Grade 5

Fifth graders benefited greatly from departmentalized instruction this year, transitioning between language arts/social studies and math/science classes. This structure helped them begin developing crucial executive functioning skills, such as responsibility and organization, in preparation for middle school.

All students actively participated in the Invention Convention, applying their inquiry and investigation skills through creative problem-solving projects.

Fifth graders also took part in the C3 program, a collaborative initiative led by a Southington police officer and Southington STEPS, designed to enhance students' decision-making skills. Many Grade 5 STEPS leaders generously volunteered in Kindergarten classrooms and assisted with school-wide events, demonstrating leadership and community spirit. Additionally, a team-building day at Camp Sloper provided valuable opportunities to strengthen peer relationships and support a smooth transition to middle school.

To bring history to life, students enjoyed an immersive field trip to Sturbridge Village, where they experienced colonial life firsthand. Their time at Thalberg culminated with a memorable class day at Camp Sloper, celebrating their growth and accomplishments as they prepared for middle school.

Ongoing Work

As Thalberg continues to embed collaboration, communication, critical thinking, and creativity into daily instruction, professional learning will expand during the 2025–2026 school year with the rollout of the Benchmark Advance program in grades 3–5. Strong collaboration between teachers and district coaches will be essential to deliver high-quality instruction and meet rigorous student achievement goals. Additionally, restorative practices will be a priority to ensure that all members of our school community feel valued, supported, and heard.