

WATERBURY PUBLIC SCHOOLS

Group/Team:	Board of Education Curriculum Committee		
Location:	Superintendent's Conference Room	Norms Reviewed:	
Date of Meeting:	January 28, 2020	Start Time:	
Minutes Prepared By:		Finish Time:	

Attendance at Meeting			
	PRINT NAME	POSITION	
1	KAREN HARVEY	BOE	
2	Janet Frenis	Elementary Math Supervisor	
3	Jeannine Minort-Kale	Secondary Math Supervisor	
4	GREG RODRIGUEZ	Dep. Sup	
5	Darren Schwartz	CAO	
6	Melissa Adarno	BOE	
7	John Reed	Science Supervisor	
8	Mike Meati	CTE Supervisor	
9	Rocco Orso	BOE	
10	Keana Ruffolo	Superintendent	
11	Tom Van Jan	BOE	
12	P. Veda Harris	SS Supervisor	
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WATERBURY PUBLIC SCHOOLS

Purpose of Meeting – Instructional Focus:

Curriculum Committee

1/28/2020

Meeting Notes, Decisions, Issues (May include the meeting agenda)

Agenda included
meeting started @ 5:00pm Tom
meeting adjourned @ 7:39 pm

Meeting Notes Continued

5:00 meeting started

1) Physics - NGSS taught in 11th or 12th gr.

- 3 Dimensional teaching
 - 8 Science & Engineering Practices
 - Designing solutions for problems
 - More Active "Minds On"
 - Rigorous
 - Goal "to think for themselves"
 - CREC Curriculum (pg. 2 handout)
 - Physics to be implemented in Fall 2020
 - Summary of SE Instructional Model (pg. 6 handout)
 - Science in elementary school improving
 - Anchor Phenomena - 4 Units (pg. 3 handout)
 - Multiple NGSS PDs with ACES & CT Science Center for teachers with correct CREC consultants
- Question by Karen about Big Bang Theory & sensitive to students religious beliefs. Mr Reed replied they won't change student's beliefs.

Darren S. feels comfortable to start PD on 3/6/20 & move forward implementing curriculum in Aug. 2020

Approved CREC With Title I funds

Karen - motion to move to board
and -Melissa

cont. →

2) March 6-8th Update - overview

- 3PP in Oct¹⁹ for materials include assessments that measure with CCS
- wanted online data mgmt system
- include PD
- covid 9 responses to 3PP
- Narrowed the field to 2 (look for 2nd presentations)
- Janet Frenis has 3PP overview for reference
- Extensive work to evaluate standards-rated high for alignment

Deanne Minor-Kate - Superv - Professional Learning Plan

1) Prof. devel. to build teachers capacity with methods of instruction & content

2) Coaching & on-going support

Improve effectiveness of tier 1 instruction through ongoing support in lesson plan develop. & coaching.

No voting or decisions need to be made today.

Final decision ASAP - still need research & conversations

* PD on 3/6/2020 - selection is ready per Darren.

3) Career & Technical Education (CTE) - Mike superv. vision for CTE is to build rigorous, coherent & cohesive programs that prepares all students for college, career & life readiness. (pg. 2 handout)

- Career Pathways
- Dual Enrollment Courses
- Industry Recognized Credentials
- Work Based Learning Experiences
- Employable Skills

(Portrait of a Graduate)

- Stakeholders (pg. 2 handout)
- Perkins V Grant - CT State Dept of Educ.
CT Approved Career Clusters
- CTE Academies & Career Pathways (pg. 3 handout)
- Leveraging Best Practices in our district

cont. →

WATERBURY PUBLIC SCHOOLS

Next Steps (Include action items)		
Action	Assigned to	Due Date
another meeting in a few months		

Next Meeting			
Date:		Time:	
Location:			
Agenda:			

Meeting Minutes guidelines:

- Publish Minutes within 48 hours of any meeting
- Minutes available to all stakeholders (binders, shared drive, e-mail, website)
- Send Minutes via email to all team members

contd.

3) - Portrait of a Graduate - employability skills ★
 (pg. 5 handout)

- Tied to Port. of a Grad. vision
 (pg. 6 handout)

~~Craft lessons to craft~~

- various funding sources will be utilized to ensure program quality including Curriculum writing, professional learning, equipment, supplies & support.

- Focus 6-12th gr

- Community & Corporate Alliances

4) Social Studies Curriculum - Ms. Harris ^{veda}

• SERC introducing Black/Latino course of studies. Grades 9-12

• NO vote tonight!

• Will try to implement ASAP sooner than ^{legislative date} 2023-2023

• Questionnaires going to be sent out to other districts to get feedback on their curriculum

• Researched out of state curriculum & sent info to SERC for review & consideration.

• Impossible to cover the entire history of Afro/Latino but introduce the students

• Hope legislative continues to grow



- Parents' concern - discussions on the following -
- Unintended isolation amongst students
- Don't want to delete the reg history
- currently legislation as an elective for now
waiting to see the product / results
- we can as a board discuss if we decide to mandate the curriculum as a requirement to graduate

* Tom / Verna discussed previously about lengthening the school hours to be able to implement all new curriculum that is necessary to improve our students education.

- Important to introduce new curriculum correctly rather than quickly.
- Purpose of meeting is simply to introduce Sec. Stud. curr.

Agreed noted - under advisement to have a sub-committee for prog. as it relates to Afro-Latino Studies.

Tom will keep it in mind

Physics Curriculum Implementation

Waterbury Public Schools

Board of Education

1-28-20

John Reed
Science Supervisor



Darren Schwartz
Chief Academic Officer



CREC Consortium Curriculum

- 50 + Districts
- Detailed unit and lesson plans
- 5E instructional model
- Close connection to NGSS standards
- Links to supporting materials
- Assessments based on performance expectations

Secondary Curriculum Implementation Schedule

- Grades 6, 7, 8, Physical Science, Biology, and Chemistry all fully implemented
- Physics to be initiated in Fall 2020
- Science Council to develop Physics pacing guide, assessments in Spring 2020

5E Model

Students build their own understanding from experiences and new ideas

1. Engage
2. Explore
3. Explain
4. Elaborate
5. Evaluate

Anchor Phenomena

- Unit 1 - Preventing an asteroid collision with earth
- Unit 2: Energy transfer in natural disasters – volcanoes, tsunamis, hurricanes
- Unit 3 – Battery fires – how we generate, store, and use portable energy
- Unit 4 – Global communications disruption – how our technology works, and how it can be protected

Physics Implementation Support

- Multiple NGSS PDs with ACES and the CT Science Center
- Curriculum PD with CREC consultants on 8/22/19, 10/4/19, and upcoming on 3/6/20
- Development of pacing guides with links to resources and alternate activities

Unit Synopsis

In this unit, students will answer the question, "How do we protect ourselves from collisions?" through the framing phenomenon of an asteroid crashing into the Earth. Using an online asteroid simulator called Impact EARTH!, students will gain initial experience with using computational data to understand cause and effect and begin to formulate ideas about the phenomenon. At a smaller scale, students will use car crashes to understand the basic mechanics of collisions, such as momentum and Newton's Second Law, through laboratory explorations and activities. Students will construct a design solution for an egg drop challenge in order to evaluate their understanding of how collision forces can be minimized. As students build their understanding of collisions at the known, everyday scale, their learning will expand beyond Earth, returning to the original phenomena of an asteroid. Students will understand the interactions of objects in space by examining and applying Kepler's Laws in virtual simulations and practice. In order to understand where space objects come from, the Big Bang Theory will be introduced. Students will be asked to use scientific evidence, such as atomic spectra, to construct a scientific argument about the validity of the Big Bang Theory. In the culminating performance task, students will take on the role of a team of astrophysicists, applying their collective knowledge to answer the unit driving question by designing a "protection plan" that would keep the Earth safe from a famous asteroid crash. Students will analyze the problem using computational data from the original Impact EARTH! asteroid simulator, and present a solution in video or written form to their peers.

See [Physics Course - Unit Bundle Outline 2019](#) for more information on this unit's placement within the course.

Suggested Pacing:

Approximately 32-37 hours

Anchoring Phenomenon/Design Problem:

- [Asteroid Collision with Earth](#)

Unit Driving Question(s):

- How do we protect ourselves from collisions?

Culminating Performance Task:

- Students will create a video, presentation or written proposal to present their protection idea to the government or UN on how they would prevent/ mitigate an astronomical object collision with earth.

NGSS Performance Expectation(s): (Hyperlinks will bring reader to NGSS Evidence Statements)

- [HS-PS2-1](#). Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.
 - [Clarification Statement: Examples of data could include tables or graphs of position or velocity as a function of time for objects subject to a net unbalanced force, such as a falling object, an object rolling down a ramp, or a moving object being pulled by a constant force.]
 - [Assessment Boundary: Assessment is limited to one-dimensional motion and to macroscopic objects moving at non-relativistic speeds.]
- [HS-PS2-2](#). Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.
 - [Clarification Statement: Emphasis is on the quantitative conservation of momentum in interactions and the qualitative meaning of this principle.]
 - [Assessment Boundary: Assessment is limited to systems of two macroscopic bodies moving in one dimension.]
- [HS-PS2-3](#). Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.*
 - [Clarification Statement: Examples of evaluation and refinement could include determining the success of the device at protecting an object from damage and modifying the design to improve it. Examples of a device could include a football helmet or a parachute.]
 - [Assessment Boundary: Assessment is limited to qualitative evaluations and/or algebraic manipulations.]
- [HS-ESS1-2](#). Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.

- [Clarification Statement: Emphasis is on the astronomical evidence of the redshift of light from galaxies as an indication that the universe is currently expanding, the cosmic microwave background as the remnant radiation from the Big Bang, and the observed composition of ordinary matter of the universe, primarily found in stars and interstellar gases (from the spectra of electromagnetic radiation from stars), which matches that predicted by the Big Bang theory (3/4 hydrogen and 1/4 helium).]
- [HS-ESS1-4](#). Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.
 - [Clarification Statement: Emphasis is on Newtonian gravitational laws governing orbital motions, which apply to human-made satellites as well as planets and moons.]
 - [Assessment Boundary: Mathematical representations for the gravitational attraction of bodies and Kepler’s Laws of orbital motions should not deal with more than two bodies, nor involve calculus.]
- [HS-ETS1-1](#). Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- [HS-ETS1-3](#). Evaluate a solution to a complex real world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

Three Dimensions that form the Foundation for these NGSS Performance Expectations:

Science & Engineering Practices:	Disciplinary Core Ideas:	Crosscutting Concepts:
<p>Analyzing and Interpreting Data</p> <ul style="list-style-type: none"> ○ Analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to make valid and reliable scientific claims or determine an optimal design solution. (HS-PS2-1) <p>Using Mathematics and Computational Thinking</p> <ul style="list-style-type: none"> ○ Use mathematical representations of phenomena to describe explanations. HS-PS2-2, HS-ESS1-4 <p>Constructing Explanations and Designing Solutions</p> <ul style="list-style-type: none"> ○ Apply scientific ideas to solve a design problem, taking into account possible unanticipated effects. (HS-PS2-3) 	<p>PS2.A: Forces and Motion</p> <ul style="list-style-type: none"> ○ Newton’s second law accurately predicts changes in the motion of macroscopic objects. (HS-PS2-1) ○ Momentum is defined for a particular frame of reference; it is the mass times the velocity of the object. (HS-PS2-2) ○ If a system interacts with objects outside itself, the total momentum of the system can change; however, any such change is balanced by changes in the momentum of objects outside the system. (HS-PS2-2, HS-PS2-3) <p>PS4.B: Electromagnetic Radiation</p> <ul style="list-style-type: none"> ○ Atoms of each element emit and absorb characteristic frequencies of light. These characteristics allow identification of the presence of an element, even in microscopic quantities. (secondary) (HS-ESS1-2) <p>ESS1.A: The Universe and Its Stars</p> <ul style="list-style-type: none"> ○ The study of stars’ light spectra and brightness is used to identify compositional elements of stars, their movements, and their distances from Earth. (HS-ESS1-2) ○ The Big Bang theory is supported by observations of 	<p>Cause and Effect</p> <ul style="list-style-type: none"> ○ Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. (HS-PS2-1) ○ Systems can be designed to cause a desired effect. (HS-PS2-3) <p>Systems and System Models</p> <ul style="list-style-type: none"> ○ When investigating or describing a system, the boundaries and initial conditions of the system need to be defined. (HS-PS2-2) <p>Energy and Matter</p> <ul style="list-style-type: none"> ○ Energy cannot be created or destroyed—only moved between one place and another place, between objects and/or fields, or between systems. (HS-ESS1-2)

<ul style="list-style-type: none"> o Construct an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future. (HS-ESS1-2) o Evaluate a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and trade-off considerations. (HS-ETS1-3) 	<p>distant galaxies receding from our own, of the measured composition of stars and non-stellar gases, and of the maps of spectra of the primordial radiation (cosmic microwave background) that still fills the universe (HS-ESS1-2)</p> <ul style="list-style-type: none"> o Other than the hydrogen and helium formed at the time of the Big Bang, nuclear fusion within stars produces all atomic nuclei lighter than and including iron, and the process releases electromagnetic energy. Heavier elements are produced when certain massive stars achieve a supernova stage and explode. (HS-ESS1-2) 	
<p>Asking Questions and Defining Problems</p> <ul style="list-style-type: none"> o Analyze complex real-world problems by specifying criteria and constraints for successful solutions. (HS-ETS1-1) 	<p>ESS1.B: Earth and the Solar System</p> <ul style="list-style-type: none"> o Kepler's laws describe common features of the motions of orbiting objects, including their elliptical paths around the sun. Orbits may change due to the gravitational effects from, or collisions with other objects in the solar system. (HS-ESS1-4) 	
	<p>ETS1.A: Defining and Delimiting an Engineering Problem</p> <ul style="list-style-type: none"> o Criteria and constraints also include satisfying any requirements set by society, such as taking issues of risk mitigation into account, and they should be quantified to the extent possible and stated in such a way that one can tell if a given design meets them. (secondary) (HS-PS2-3, HS-ETS1-1) <p>ETS1.B: Developing Possible Solutions</p> <ul style="list-style-type: none"> o When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. (HS-ETS1-3) 	
	<p>ETS1.C: Optimizing the Design Solution</p> <ul style="list-style-type: none"> o Criteria may need to be broken down into simpler ones that can be approached systematically, and decisions 	

	<p>about the priority of certain criteria over others (trade-offs) may be needed. (secondary) (HS-PS2-3)</p>	
<p>Possible Common Core State Standards Connections:</p> <p><i>ELA/Literacy-</i></p> <ul style="list-style-type: none"> ○ RI.11-12.7 - Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem (HS-ESS1-2) ○ W.9-10.1 - Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. (HS-ESS1-2; ETS1-3) <p><i>Mathematics -</i></p> <ul style="list-style-type: none"> ○ N.Q.1 - Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. (HS-PS2-2) ○ A.CED.1 - Create equations and inequalities in one variable and use them to solve problems. (HS-PS2-1; HS-PS2-2) ○ A.CED.4 - Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. (HS-PS2-1; HS-PS2-2) 		
<p>PROGRESSION OF LEARNING</p>		
<p>Overview Learning Sequence 1: Student Engagement with the Anchoring Phenomenon</p> <ul style="list-style-type: none"> ○ Driving Question: How can we protect the Earth from asteroid collisions? ○ Learning Sequence 1 ○ Relationship to Anchoring Phenomena/Design Problem: Introduction of the anchoring phenomenon and classroom exploration of the board topics that will be covered in the bundle. 		
<p>Overview Learning Sequence 2:</p> <ul style="list-style-type: none"> ○ Driving Question: What happens in a collision? What would happen if an asteroid hit Earth? ○ Learning Sequence 2 ○ Relationship to Anchoring Phenomena/Design Problem: Identify factors that need to be considered or involved in changing an object's motion. ○ Student Expected Outcomes: Students will ask questions and define problems that relate energy and matter to momentum and interactions between systems. 		
<p>Overview Learning Sequence 3:</p> <ul style="list-style-type: none"> ○ Driving Question: How do we protect ourselves from collisions? ○ Learning Sequence 3 ○ Relationship to Anchoring Phenomena/Design Problem: Understand and quantify how velocity, time of impact, and mass affect the force of impact of an asteroid colliding with Earth. ○ Student Expected Outcomes: Students will analyze and interpret data from different investigations that describe the effect of force and mass on an object's acceleration, momentum, and impulse. Students will use mathematical and computational thinking by modelling systems to evaluate if momentum in closed systems is conserved. 		
<p>Overview Learning Sequence 4:</p> <ul style="list-style-type: none"> ○ Driving Question: How do objects move in space? ○ Learning Sequence 4 ○ Relationship to Anchoring Phenomena/Design Problem: How objects move through space, the factors affecting their motion. ○ Student Expected Outcomes: Students will apply mathematical or computational representations to predict the motion of orbiting objects in the solar system based on scale and the principles of motion. 		

Overview Learning Sequence 5:

- **Driving Question:** Where did all of the objects that could be threats come from?
- [Learning Sequence 5](#)
- **Relationship to Anchoring Phenomena/Design Problem:** How do we know something is going to hit us, its velocity, mass and composition.
- **Student Expected Outcomes:** Students will apply their understanding of the relationship between energy and matter to construct an explanation of the Big Bang Theory supported by astronomical evidence.

Overview Learning Sequence 6: Culminating Performance Task

- **Driving Question:** How can we protect the Earth from asteroid collisions?
- [Learning Sequence 6](#)
- **Relationship to Anchoring Phenomena/Design Problem:** Create final explanation of phenomena or solution to the design problem.
- **Student Expected Outcomes:**
 - Students will analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration. (HS-PS2-1)
 - Students will use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system. (HS-PS2-2)
 - Students will apply science and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision. (HS-PS2-3)
 - Students will construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. (HS-ESS1-2)
 - Students will use mathematical or computational representations to predict the motion of orbiting objects in the solar system. (HS-ESS1-4)
 - Students will analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. (HS-ETS1-1)
 - Students will evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts. (HS-ETS1-3)

Assessments:

- **Culminating Performance Task**
 - Students will create a video, presentation or written proposal to present their protection idea to the government or UN on how they would prevent/ mitigate an astronomical object collision with earth.
- **Performance Expectation Teacher Rubrics - PHY (Development in SPRING 2020)**
- **Combined PHY Assessment Tasks (Development in SPRING 2020)**

Additional Resources:

- [PHY Unit Materials List 2019](#)
 - Click on specific tab for unit-specific materials

Summary of the 5E Instructional Model

Engagement

The teacher or a curriculum task accesses the learners' prior knowledge and helps them become engaged in a new concept through the use of short activities that promote curiosity and elicit prior knowledge. The activity should make connections between past and present learning experiences, expose prior conceptions, and organize students' thinking toward the learning outcomes of current activities.

Exploration

Exploration experiences provide students with a common base of activities within which current concepts (i.e., misconceptions), processes, and skills are identified and conceptual change is facilitated. Learners may complete lab activities that help them use prior knowledge to generate new ideas, explore questions and possibilities, and design and conduct a preliminary investigation.

Explanation

The explanation phase focuses students' attention on a particular aspect of their engagement and exploration experiences and provides opportunities to demonstrate their conceptual understanding, process skills, or behaviors. This phase also provides opportunities for teachers to directly introduce a concept, process, or skill. Learners explain their understanding of the concept. An explanation from the teacher or the curriculum may guide them toward a deeper understanding, which is a critical part of this phase.

Elaboration

Teachers challenge and extend students' conceptual understanding and skills. Through new experiences, the students develop deeper and broader understanding, more information, and adequate skills. Students apply their understanding of the concept by conducting additional activities.

Evaluation

The evaluation phase encourages students to assess their understanding and abilities and provides opportunities for teachers to evaluate student progress toward achieving the educational objectives.

**Career & Technical Education
Waterbury Public Schools
Board of Education - Curriculum Council**

Michael Merati
Supervisor
Career & Technical Education

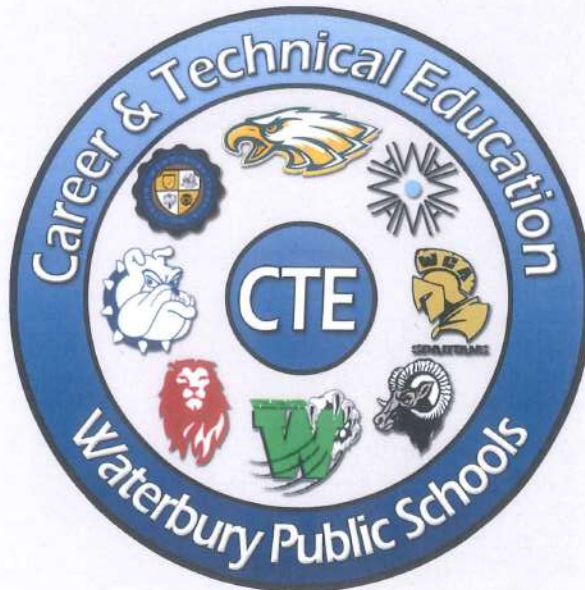


**WATERBURY PUBLIC
SCHOOLS**
ACADEMIC OFFICE

Darren Schwartz
Chief Academic Officer



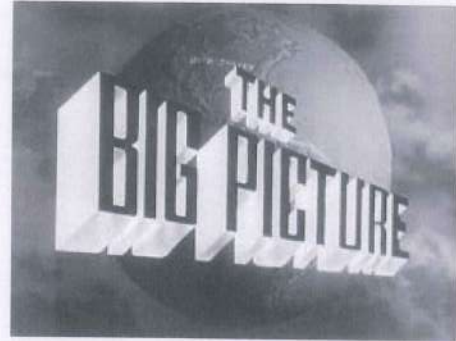
Waterbury Public Schools
Today's Students, Tomorrow's Leaders



Vision for CTE - Waterbury Public Schools

Our vision for CTE is to build rigorous, coherent and cohesive programs that prepares all students for college, career and life readiness.

- Career Pathways Development
- Dual Enrollment Courses
- Industry Recognized Credentials
- Work Based Learning Experiences
- Employability Skills & The Habits of Mind



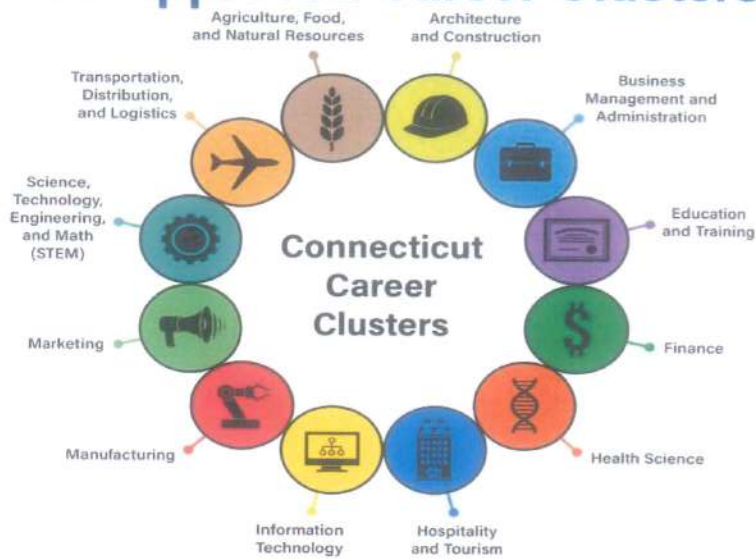
These shared experiences can be implemented district wide by aligning education with the workforce, through collaboration with students, parents, teachers, staff, and the community.

A Shared Vision for the Future of CTE

- National Center for College & Career Transitions
- Advance CTE
- State Leaders Connecting Learning to Work
- Association for Career and Technical Education
- Council of Chief State School Officers
- National Association of State Boards of Education
- U.S. Department of Labor / CT Dept. of Labor
- National Skills Coalition
- U.S. Chamber of Commerce Foundation
- Workforce Investment Boards



Perkins V: CT Approved Career Clusters



CONNECTICUT STATE DEPARTMENT OF EDUCATION



WATERBURY PUBLIC SCHOOLS CTE ACADEMIES & CAREER PATHWAYS



Business, Finance, Marketing & Entrepreneurship

Accounting
#Banking Services
Investments & Securities

Management
Marketing Communications
#Professional Sales

Information Technology & Engineering

Aerospace
Information Support Services
#Cybersecurity

Software Development
Engineering & #Robotics
Digital Communications

Health Science

Therapeutic Services
CNA & Pharmacy Tech.

Medical Asst. & Physical Therapy
EMT

Education & Training

Culinary
Teacher Preparation

JROTC

Manufacturing, Construction & Industrial Systems

Automotive
Construction

Manufacturing

Early College High School with Post University

Marketing
Legal Studies

Accounting
Criminal Justice

Management
Early Childhood Education

#Anticipated 2021 - 2022

New CTE Courses/Programs

- ❑ Aviation & Drone Technology
- ❑ Teacher Preparation
- ❑ Engineering
- ❑ Software Development
- ❑ Business & Finance
- ❑ Health Sciences Expansion



Employability Skills: A Crucial Component of College and Career Readiness
 Individuals require many skills to be college and career ready, including academic knowledge, technical expertise, and a set of general, cross-cutting abilities called "employability skills."



1. Persisting Don't give up. Push through. Ask for help. Stay focused.	2. Managing impulsivity Think before you act. Think before you speak.	3. Listening with understanding and empathy Listen to understand, not to reply.	4. Thinking flexibly Look at a problem from a new angle.
5. Thinking about your thinking Monitor your thinking.	6. Showing for accuracy Check your work.	7. Questioning and problem posing Ask questions.	8. Applying past knowledge to new situations Use what you know.
9. Thinking & communicating with clarity and precision Be clear.	10. Gather data through all senses Use your senses.	11. Creating, using, and innovating Be creative.	12. Responding with self-control and self-regulation Stay calm.
13. Taking responsible risks Try something new.	14. Finding humor Laugh.	15. Thinking interdependently Work together.	16. Showing open to continuous learning Keep learning.



Employability Skills: A Crucial Component of College and Career Readiness

Individuals require many skills to be college and career ready, including academic knowledge, technical expertise, and a set of general, cross-cutting abilities called "employability skills."



 <p>1. Persisting <i>Stick to it!</i> Persevering in task through to completion, remaining focused. Looking for ways to reach your goal when stuck. Not giving up.</p>	 <p>2. Managing impulsivity <i>Take your time!</i> Thinking before acting; remaining calm, thoughtful and deliberative.</p>	 <p>3. Listening with understanding and empathy <i>Understand others!</i> Devoting mental energy to another person's thoughts and ideas; Make an effort to perceive another's point of view and emotions.</p>	 <p>4. Thinking flexibly <i>Look at it another way!</i> Being able to change perspectives, generate alternatives, consider options.</p>
 <p>5. Thinking about your thinking <i>(Metacognition)</i> <i>Know your knowing!</i> Being aware of your own thoughts, strategies, feelings and actions and their effects on others.</p>	 <p>6. Striving for accuracy <i>Check it again!</i> Always doing your best. Setting high standards. Checking and finding ways to improve constantly.</p>	 <p>7. Questioning and problem posing <i>How do you know?</i> Having a questioning attitude; knowing what data are needed & developing questioning strategies to produce those data. Finding problems to solve.</p>	 <p>8. Applying past knowledge to new situations <i>Use what you learn!</i> Accessing prior knowledge; transferring knowledge beyond the situation in which it was learned.</p>
 <p>9. Thinking & communicating with clarity and precision <i>Be clear!</i> Strive for accurate communication in both written and oral form; avoiding over-generalizations, distortions, deletions and exaggerations.</p>	 <p>10. Gather data through all senses <i>Use your natural pathways!</i> Pay attention to the world around you. Gather data through all the senses: taste, touch, smell, hearing and sight.</p>	 <p>11. Creating, imagining, and innovating <i>Try a different way!</i> Generating new and novel ideas; fluency, originality.</p>	 <p>12. Responding with wonderment and awe <i>Have fun figuring it out!</i> Finding the world awesome, mysterious and being intrigued with phenomena and beauty.</p>
 <p>13. Taking responsible risks <i>Venture out!</i> Being adventuresome; living on the edge of one's competence. Try new things constantly.</p>	 <p>14. Finding humor <i>Laugh a little!</i> Finding the whimsical, incongruous and unexpected. Being able to laugh at one's self.</p>	 <p>15. Thinking interdependently <i>Work together!</i> Being able to work in and learn from others in reciprocal situations. Team work.</p>	 <p>16. Remaining open to continuous learning <i>Learn from experiences!</i> Having humility and pride when admitting we don't know; resisting complacency.</p>

Summary

- ❑ New Course curriculum aligned with national standards. CCSS, ISTE, NGSS, CSTA
- ❑ Various funding sources will be utilized to ensure program quality including curriculum writing, professional learning, equipment, supplies and support.
- ❑ Purpose of CTE program to ensure ALL WPS students are college, career and life ready
- ❑ Curriculum will enable all students to engage in rigorous career pathways and programs of study

FA 19-12--sHB 7082
Education Committee
Appropriations Committee

AN ACT CONCERNING THE INCLUSION OF BLACK AND LATINO STUDIES IN THE PUBLIC SCHOOL CURRICULUM

SUMMARY: This act requires all local and regional boards of education ("boards") to include African-American and black studies and Puerto Rican and Latino studies in their curriculum beginning with the 2021-22 school year and adds these topics to the state's existing required program of study for public schools. As with other required subject matter under existing law, the State Board of Education (SBE) must make curriculum materials available to help boards develop their instructional programs.

The act also requires SBE to review and approve, by January 1, 2021, a black and Latino studies high school course that the State Education Resource Center (SERC) must develop. Under the act, boards must offer the course in the 2022-23 school year, but they may do so in the 2021-22 school year.

For the school years 2022-23 to 2024-25, the State Department of Education must (1) conduct an annual audit to ensure that the black and Latino studies course approved under the act is being offered by each board of education and (2) annually report on the audit to the Education Committee.

EFFECTIVE DATE: July 1, 2019, except (1) the requirement that SERC develop and SBE approve the course are effective upon passage and (2) the addition of African-American and black and Puerto Rican and Latino studies to the required courses of study is effective July 1, 2021.

§§ 1 & 2 — AFRICAN-AMERICAN AND PUERTO RICAN AND LATINO STUDIES AS PART OF THE REQUIRED COURSES OF STUDY

Beginning with the 2021-2022 school year, the act adds African-American and black and Puerto Rican and Latino studies to the required program of study for public schools and requires boards to include these studies in their curricula. By law, the required program of study includes, among other subjects, the arts; language arts, including reading and writing; mathematics; physical education; science; and social studies, including citizenship, geography, government, and history.

In developing and implementing the new curriculum, the act allows the boards to (1) use existing and appropriate public or private materials, personnel, and other resources, including curriculum material that SBE must make available under the act and (2) accept gifts, grants, and donations, including in-kind donations. The curriculum must meet SBE-adopted statewide subject matter content standards.

As for the curriculum material that SBE must make available, prior law required

SBE, within available appropriations and using available resource material, to assist and encourage boards to include African-American history and Puerto Rican history, among other subjects, in their instructional programs. The act broadens this requirement to include African-American and black studies and Puerto Rican and Latino studies.

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The act requires SERC to develop the one-credit high school course in black and Latino studies. To do so, SERC may use (1) existing and appropriate public or private materials, personnel, and other resources, including people and organizations with subject matter expertise in African-American, black, Puerto Rican, or Latino studies and (2) the SBE curriculum materials the act requires.

SBE must review and approve, by January 1, 2021, SERC's developed course if it determines that the content is (1) rigorous, (2) aligned with state-approved curriculum guidelines, and (3) in accordance with the SBE-adopted subject matter content standards.

By January 15, 2021, SBE, in consultation with SERC, must submit to the Education Committee a description of the black and Latino studies course that includes the scope, sequence, and course objective, and a report on the course's development.

For the 2021-22 school year, the act allows any board of education to offer the state-approved course in grades 9 to 12. For the 2022-23 school year, the act requires each board to offer the course in grades 9 to 12.

BACKGROUND

SERC

SERC is a quasi-public agency that provides professional development, special education services, and other educational services to local school districts (CGS §§ 10-357a to -357g).



**Black/Latino Course of Studies
Advisory Group
Committee Descriptions***

Committee	Purpose/Tasks	Avg. # of Meetings	Time Commitment	# of Seats
<i>Research and Evaluation</i>	To ascertain what current implementation and best practices look like across the state, including development and analysis of a high school curriculum survey. In addition, the review and synthesis of other state's curriculum.	3 (6-8 hours)	January and February	5
<i>Focus Groups</i>	To garner input from a variety of stakeholders, including community members, educators (i.e., administrators, curriculum coordinators, teachers), parents, and students. This committee will organize four (4) regional focus groups at local high schools, determine the protocol for each focus group, and conduct analysis of themes to inform course development.	6 (12-15 hours)	January and February	5
<i>Infrastructure Supports</i>	To develop recommendations for implementation of course, including: description for Program of Studies, resources for board of education course approval process, staffing/credentialing requirements, and high school/college credit determination.	3 (6-8 hours)	February and March	5
<i>Course Syllabus</i>	To develop learning objectives and outline scope and sequence aligned with national and local standards.	5 (10-12 hours)	January thru March	5
<i>AA/Black Content Development</i>	To create repository of African American/Black resources and materials for lesson planning.	5 (10-12 hours)	March thru May	5
<i>PR/Latino Content Development</i>	To create repository of Puerto Rican/Latino resources and materials for lesson planning	5 (10-12 hours)	March thru May	5
<i>Integration of Content and Assessment</i>	To create common unit, midterm, and final exams aligned with essential knowledge and skills of course.	4 (8-10 hours)	April thru June	5
<i>Publication and Dissemination</i>	To work with the approved vendor to produce curriculum in print and electronic format that can be easily disseminated. In addition, the committee will support the development of a method to gather feedback during initial phase of implementation.	3 (6-8 hours)	July thru September	5
<i>Professional Learning Plan</i>	To outline professional learning plan for initial implementers, including summer institute and coaching.	3 (6-8 hours)	July thru September	5

*All Committees will require independent intersession work in addition to the face-to-face meeting time listed.

Response ID Name

Agency/Organization/District/School

1st Choice:Committee Selection

28 Fiona Vernal	University of Connecticut	African American/Black Content Development	7
31 Dennis Culliton	Witness Stones Project	African American/Black Content Development	
35 Meghan Hatch-Geary	Woodland Regional High School	African American/Black Content Development	
36 Rashanda McCollum	Students for Educational Justice	African American/Black Content Development	
37 Stephen Balkaran	Central CT State University	African American/Black Content Development	
David Canten	Conn College	African American/Black Content Development	
41 Subira Gordon	ConnCAN	African American/Black Content Development	
7 Nataliya Braginsky	New Haven Public Schools	Course Syllabus	6
14 Liz Mancini	Middletown Public Schools	Course Syllabus	
18 Sara Slogesky	CREC Magnet Schools	Course Syllabus	
22 Addys Castillo	Citywide Youth Coalition	Course Syllabus	
27 Diane B. Cloud	retired admin/Farmington PS	Course Syllabus (2nd choice)	
29 Anne Gebelein	University of Connecticut	Course Syllabus (2nd choice)	
4 William Johnson	William Caspar Graustein Memorial Fund	Focus Groups	6
8 Jennifer Heikkila Diaz (Jenny or JHD)	Teach For America-CT	Focus Groups	
19 Vonetta Romeo-Rivers	The Amistad Center For Art & Culture	Focus Groups	
20 Steve Armstrong	Connecticut Department of Education	Focus Groups	
32 Stephanie Chapman	Students for Educational Justice	Focus Groups	
38 Dave Kimball	Avon Public Schools	Focus Groups	
40 Anthony Roy	CT River Academy	Integration of Content and Assessment (2nd choice)	5
30 Jacquelyn Whiting	Cooperative Educational Services (CES)	Integration of Content and Assessment (2nd choice)	
Delores Bolton	Bloomfield Public Schools	Integration of Content and Assessment (2nd choice)	
Walton Brown-Foster	CCSU	Integration of Content and Assessment (3rd choice)	
Marco Cenabre	New Haven Public Schools/Teach for America-CT	Integration of Content and Assessment	
13 Jessica Blitzer	West Hartford Public Schools	Integration of Content and Assessment	
3 Shannon Marimon	ReadyCT	Professional Learning Plan	7
9 Katie Burton	Harriet Beecher Stowe Center	Professional Learning Plan	
23 Teresa Carroll	CAPSS	Professional Learning Plan	
24 Gil Traverso	Self-Employed Leadership Consultant	Professional Learning Plan	
Glenn Lugarini	CAS	Professional Learning Plan	
Elizabeth Normen	CT Explored Inc.	Professional Learning Plan (2nd choice)	
33 John Tully	CCSU Department of History	Professional Learning Plan	
39 Dr. Kelly K. Hope	Kelly Koren Unlimited/ The Ungroup (Waterbury)/ N	Publication and Dissemination (2nd choice)	3
26 Warren Leach	The Ungroup society	Publication and Dissemination (2nd choice)	
5 Doug Casey	Commission for Educational Technology	Publication and Dissemination	
10 Guillermo Irizarry	University of Connecticut	Puerto Rican/Latino Content Development	6
16 Dr. Agnes Quinones	SERC Board	Puerto Rican/Latino Content Development	
17 Thomas Thurston	Gilder Lehrman Center, Yale University	Puerto Rican/Latino Content Development	

Yadriel Rodriguez	Student, UCONN	Puerto Rican/Latino Content Development	4
Gladys Labas	SCSU	Puerto Rican/Latino Content Development	
11 Mary Ann Mahony	Central Connecticut State University	Puerto Rican/Latino Content Development (2nd choice)	
34 Juan Coronado	Central Connecticut State University	Research and Evaluation (2nd choice)	
21 P. Veda Harris	Waterbury School District	Research and Evaluation	0
25 Abbey Sacco	Bolton High School	Research and Evaluation	
15 Richard W Radlo	CTECS	Research and Evaluation (2nd choice)	
		Infrastructure Supports	
		Infrastructure Supports	0
		Infrastructure Supports	
		Infrastructure Supports	