# K-12 Universal Curricula Design Principles

A Handbook for Evaluation, Renewal, and Development of District Curricula



Connecticut State Department of Education

#### **Contents**

Acknowledgements	II
Overview	1
Curriculum Defined	1
Core Values	2
Design Principles	3
Phases of Curricula Development	4
Appendixes	
Appendix A: Universal Curricula Template	
Appendix B: Glossary	17
Appendix C: References	
Appendix D: CSDE Contacts by Content	20

Connecticut State Department of Education is committed to a policy of affirmative action/equal opportunity for all qualified persons. The Connecticut Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of age, ancestry, color, civil air patrol status, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status or workplace hazards to reproductive systems, unless there is a bona fide occupational qualification excluding persons in any of the aforementioned protected classes.

Inquiries regarding the Connecticut State Department of Education's nondiscrimination policies should be directed to:
Levy Gillespie, Equal Employment Opportunity Director/Americans with Disabilities Act (ADA) Coordinator, Connecticut State
Department of Education, 450 Columbus Boulevard, Suite 505, Hartford, CT 06103, 860-807-2071, <a href="https://example.com/levy.gillespie@ct.gov">levy.gillespie@ct.gov</a>.

## **Acknowledgements**

This Connecticut State Department of Education (CSDE) K–12 Curricula Design Principles Handbook was designed by the CSDE Academic Team comprised of content directors and education consultants. The CSDE Academic Team engaged in the development of this statewide handbook.

Charlene M. Russell-Tucker, Commissioner of Education

Desi D. Nesmith, Deputy Commissioner of Education

Irene E. Parisi, Chief Academic Officer

Dr. Melissa K. Wlodarczyk Hickey, Director of Reading and Literacy

Megan Alubicki Flick, English Learners, Education Consultant

Stephen Armstrong, Social Studies K-12, Education Consultant

Kyllie Freeman, CTE, Associate Education Consultant Education

Suzanne Loud, CTE, Education Consultant

Harold Mackin, CTE, Education Consultant

Dr. Ronald Michaels, Science K-12, Education Consultant

Jennifer Michalek, Mathematics & Computer Science K-12, Education Consultant

Dr. Joanne R. White, English Language Arts K-12, Education Consultant

Thanks are extended to the multiple individuals, groups, and organizations for reviewing and proofing the document and providing important editorial comments and feedback.

#### **Overview**

It is imperative that all students have access to high quality, high-impact teaching and learning aligned to the content standards adopted by the Connecticut Board of Education (Board) to ensure Connecticut's students have access to equitable educational opportunities and succeed within a culture of high expectations. Local and regional boards of education have the jurisdiction to develop and implement educational goals that establish specific expectations for their students in terms of skills, knowledge, and competence (C.G.S., Sec. 10-220). A variety of content areas and courses are mandated to be included in a district's program of instruction (C.G.S. Sec. 10-16b) and for students to earn high school credits, courses must align to the content standards adopted by the Board (C.G.S., Sec. 10-221).

The Connecticut K–12 Curricula Design Principles Handbook provides a common language and structure to assist in curricula design to increase consistency within and among instructional programs, districts, schools, grade levels, and content areas statewide. The systematic and intentional process outlined in the handbook offers Connecticut stakeholders opportunities to refine their application of the curricula development process and support curricula evaluation and renewal. Each phase of development contains key considerations and questions to ask yourself as an instructional designer.

## **Curricula Defined**

Curriculum is different from state and national academic standards in that standards define what students are expected to learn by subject and grade. The curriculum combines how teachers will teach to develop skills, content knowledge and assess students' ability to transfer learning. Curriculum is the central roadmap for communicating essential learning outcomes for mastery by the end of a grade or grade band. The structure and organization of curriculum is guided by a curriculum framework that must include standards aligned concepts, skills, high impact instructional methods, high quality materials and multiple means of assessment aligned to standards.

#### **Core Values**

#### **Equitable and Inclusive Curriculum**

The CSDE believes all learners should have access to on-grade-level instruction daily. To ensure equitable access to curricular resources, the CSDE is spotlighting the position statement on <u>Culturally Responsive Education</u> and <u>Universal Design Learning (UDL) Principles</u> as lead guidelines for analyzing, planning, designing, and developing curricula to intentionally reduce barriers to learning and access to rigorous curricula. By engaging in these phases with the UDL Principles, all learners will be guaranteed to work and respond in a format that meets their needs for learning and expression.

The UDL framework can support teachers and curriculum leaders to make decisions on curricula development that incorporate each of the CSDE Design Principles.

It is important for curricular resources to be culturally responsive and flexible to adjust to the needs and interests of all learners. Adopting an understanding of curriculum through the culturally relevant and UDL lens places the learner at the center of the teaching and learning process. When teachers develop a learning environment that is relevant to and reflective of their students' social, cultural, and linguistic experience there is an intentional connection to their culturally- and community-based knowledge to the classroom learning experiences. This creates an environment of reciprocal respect and collaboration.

#### **Opportunities for Mastery**

The CSDE believes in creating expectations for Mastery-Based Learning (MBL) and teaching. The vision for this work is to ensure all students have access to multiple and flexible pathways for learning that will prepare them for college, career, and civic life, including mastery-based systems of accountability for student growth.

MBL places emphasis on rigorous college and career learning competencies and quality curricula and instruction drawn from state graduation requirements and state content standards. Learning will emphasize authentic experiences and application of critical knowledge that students engage in at school, in the community or online. A Mastery-Based approach can begin with intentional learning expectations beginning in kindergarten through grade 12.

MBL requires schools to create powerful learning experiences for every student regardless of his/her past learning history and allows students to demonstrate mastery through a body of evidence. The CSDE K–12 Curricula Design Principles Handbook provides the curricula design templates to support the intentional opportunities for personal, mastery-based learning.

## **Culture of Inquiry**

The CSDE believes learners are at the center of curricula planning and design. This requires a community culture that empowers all learners to ask questions, share their stories and voice what they need to become agents of change. By creating a community of learners and networks, educators and learners partner in the ongoing analysis, planning, and development of curricula resources that match their strength, passion, curiosity, need and diversity.

## **Design Principles**

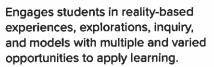
The Connecticut K–12 Curricula Design Principles provide guidance and highlight important considerations for districts to create a collaborative curricula-development process committed to designing curricula that embodies these six core principles. These principles ensure daily opportunities to engage students with grade-level learning opportunities to accelerate learning:

#### **Focused**



Builds upon and connects to prior knowledge providing aligned intentional learning targets focused on the educational standards and describing what all students should know/understand/do to achieve future success in college, career, and civic-life.

#### Relevant





#### **Flexible**

Coherent



Offers inherent flexibility, allowing for anytime/anywhere personalized, student-centered learning, and incorporating opportunities for voice and choice. Makes strategic use of both in-person and remote learning utilizing a blended approach to teaching and learning.

#### **Rigorous**



Communicates high expectations and supports learning for historically marginalized students and provides high quality, high impact learning opportunities in all learning models (e.g., synchronous, asynchronous, in-person, hybrid, or remote).

### Diverse, Equitable, and Inclusive



Connects and links learner goals, learner framework, vision or portrait of a learner/graduate. Answers the questions of how does this unit build upon and connect to prior knowledge, and how does it prepare the student for future learning.

Includes opportunities to value and relate content to students' cultures to celebrate the diversity of topics, students, cultures and groups so that students can take perspective and develop a depth of understanding of the events presented. Teachers embrace difficult conversations, provide equal access, and ensure learning is culturally responsive and inclusive.



## **Phases of Curricula Development**

The very core of instruction includes the teacher and student interrelating with the content. To increase student learning, one must improve the level and complexity of content, grow the knowledge and skills of the teacher, and elevate student engagement. Content improvement begins with the development of quality curricula. This development, backed by evidence-based practices is a multi-step, iterative design process. Development of curricula progresses from evaluating the existing teaching and learning, to designing improved teaching and learning, to implementing revised teaching and learning, and back to evaluating the revised teaching and learning. Many school districts carryout this process in a planned and systematic manner that includes the four phases listed below:



#### Phase 1

#### **Analysis and Planning**

- a. Convening a Curricula Design and Development Team
- b. Identifying Key Issues and Trends in the Specific Discipline to Prioritize Content
- c. Assessing Assets, Strengths, Needs, Issues, and gaps



#### Phase 2

#### **Articulating and Developing**

- a. Articulating a K-12 Program Philosophy
- b. Defining K-12 Program Learning Goals and Desired Results
- c. Developing and Sequencing K-12 Grade-Level Course Learning Targets
- d. Developing and/or identifying resource materials to Assist with Curricula Implementation
- e. Developing and/or Identifying Assessment Items and Instruments to Measure Student Progress



#### Phase 3

#### **Implementing**

- a. Putting the New Curricula into Practice
- b. Providing Professional Learning and Support
- c. Monitoring implementation at District, School, and Classroom



#### Phase 4

#### **Evaluating**

- a. Assessing Fidelity of Implementation
- b. Determining the Success and Impact of the Curricula
- c. Renewing/Revising Curricula



## **Phase 1: Analysis and Planning**

#### **Convening a Curricula Development Team**

The first step of the curricula development process is to convene a curricula development team. Such a team, consisting primarily of teachers who represent the various schools and grade levels in a district, administrators, members of the public (e.g., parents, business and industry representatives), and perhaps students, becomes the driving force for curricula change and the long-term process of implementing the curricula. Please note that each local and regional board of education must have a school district curricula team that recommends, develops, reviews, and approves all curricula for the local or regional school district (C.G.S., Sec. 10-220[e]).

#### Identifying Key Issues and Trends in the Specific Discipline

The team should engage in a study of evidence-based practices and current research that supports effective teaching and learning strategies to meet the needs of all students (i.e., including special education students, Multilingual learners/English learners [MLs/ELs], and academically fragile students). Team members should also be provided with recent district Next Generation Accountability data and be familiar with the curricula, instructional materials, and assessments currently utilized.

The CSDE <u>AcclerateCT</u> and companion playbooks highlight districts prioritizing common issues and problems through innovative approaches, ideas, and strategies that are producing successful outcomes. The team can connect with fellow districts and borrow, adapt, and put to use these proven models in their own districts and schools.

As teams engage in this process, members are likely to identify many of the following issues and trends that will need to be addressed as the curricula development process moves forward:

- meeting the needs of all students (i.e., including special education students, MLs/ELs, and academically fragile students);
- equity-based learning theory and other cognitive psychology findings on how students learn;
- · what determines developmental readiness or developmental appropriateness;
- · the current expectations of the field;
- the knowledge of and readiness for change on the part of teachers;
- the availability of resources;
- · the role and availability of information and technology resources;
- · scheduling challenges;
- · methods and purposes of assessments;
- · learning models (in-person, virtual, remote); and
- · professional learning.

#### Assessing Assets, Needs, and Issues

Asset-based approaches to help students see and build on their own strengths before, during, and after the implementation of curricula upholds the commitment to creating a learner-centered environment. Curricula development is a process by which meeting student needs leads to improvement of student learning. Curricula developers should consider gathering as much information as possible, including: national and state standards, district's portrait of a graduate, desired outcomes or expectations of a high-quality curricula, the role of assessment, the status of student achievement, and actual program content. The information can highlight the concerns and attitudes of teachers, administrators, parents, and students. The information can include samples of assessments, lessons from teachers, assignments, scores on state standardized tests, resources currently used, student perception, and feedback from parents.

Armed with a common set of understandings that arise from the identification of issues and trends, a curricula development team is wise to gather information to best ascertain the perceptions, concerns, and desires of each of the stakeholders in the process. By examining these data carefully, key issues will emerge that will influence the curricula design. For example:

- · teachers may be dissatisfied with older content and techniques in light of recent research;
- teachers may not have materials or may not know how to use available materials to enhance understandings;
- teachers may want to integrate locally identified digital tools and resources to enhance learning;
- teachers and others may wish to relate the content of the program more closely to contemporary problems and issues;
- teachers may be looking for ways to increase the amount of interdisciplinary work in which students are engaged;
- · students may express a need for different and/or enriched curricular opportunities;
- · Students may request opportunities for problem based projects;
- parents and others may have ideas, questions or concerns about implementation; and/or
- test scores may be declining or lower than expected in some or all disciplines.

An effective curricula development process incorporates gathering information to guide the team. The information, commonly gathered through surveys, discussions, and assessment data, most frequently includes:

- teacher analysis of the present curricula to identify strengths, weaknesses, omissions and problems;
- · sample lessons that illustrate curricula implementation;
- · sample assessments that illustrate the implementation of the curricula;
- teachers at each grade level identifying what they perceive to be the most serious issues within the curricula;
- a detailed analysis of state and local data, including assessment information, grade-level criterionreferenced test data and course final examination results;
- meetings with teachers, guidance counselors, and administrators to generate suggestions for change and improvement; and
- parents and other community members including invitations to community meetings to ascertain their concerns and expectations for the program.

There are several questions that the curricula team should be including in their research, such as:

- How will the curricula offer personalization opportunities to meet the needs of all children, including children with disabilities and ELs?
- · How will the curricula be culturally, ethnically, and linguistically responsive?
- · How will the curricula address the social-emotional needs of students?

The data collected in conjunction with information obtained from research and various resources become the basis upon which the entire written curricula — from philosophy to goals to assessment — is then built.



## Phase 2: Articulating and Developing Overall K-12 Scope and Sequence

Districts create a variety of curricula teams in addition to the legislated school district curricula team. These teams are often content-focused but work together to create a coherent framework of courses/programs. A curricula team should create an overarching curricula philosophy, learning goals, desired results, scope, and sequence. Teams should work across disciplines to include interdisciplinary connections as well as opportunities for application of learning.

#### Articulating a K-12 Curricula Philosophy

The following fundamental questions guide the overarching philosophy of the curricula:

- "Why learn (specific discipline)?"
- "Upon what guiding principles is our curricula built?"
- "What are our core beliefs about teaching and learning in (specific discipline)?"
- · "What are the essential questions?"
- "How will we use assessment to improve the curricula, teacher knowledge and skills, and student learning?"
- "How will we adapt the curricula to be utilized in various teaching situations (e.g., in-person, online, blended)?"

As such, the curricula philosophy provides a unifying framework that justifies and gives direction to content-based instruction. After having studied curricula trends and assessed the current program, curricula developers should be ready to construct a draft philosophy to guide the K–12 curricula. Such a philosophy or set of beliefs should be more than just "what we think should be happening," but rather "what our curricula is actually striving to reflect." It is important that this work aligns to the district's vision of the graduate.

An effective philosophy statement has the following characteristics:

#### Accuracy

- The philosophy represents supportable claims.
- The philosophy states an educationally appropriate case for the role of (specific content) in the
   K–12 curricula and its importance in the education for all students.

#### Linkages

- The curricula philosophy is consistent with the district's philosophy of education.
- The philosophy provides a sound foundation for curricula goals and learning targets.
- The district's teachers are sincerely committed to each belief outlined in the philosophy.

#### · Breadth and Depth

- The philosophy aligns with evidence-based pedagogical practices.
- The philosophy provides a clear and compelling justification for the curricula.

#### Usefulness

- The philosophy is clear and can be understood by parents and other non-educators.

#### Defining K-12 Curricula Learning Goals and Desired Results

The purpose of the K–12 curricula philosophy is to describe the fundamental beliefs and inform the process of instruction. The curricula delineates K–12 curricula goals as well as grade-level and course goals that address the key cognitive and affective content expectations/results for the curricula. Curricula goals:

- are open-ended, to provide for continuous growth in K-12 and into adult life;
- Grow logically out of and clearly linked to the philosophy of the specific content and the linkage is clear;
- are comprehensive enough to provide the basis for a quality K-12 curricula for all learners at all places on the learning continuum;
- · include each of the outcomes suggested by the philosophy;
- are realistic and manageable lending to the development of one or more grade level and course learning targets; and
- · align to the district's portrait of a graduate.

#### Developing and Sequencing K-12 Grade-Level and Course Learning Targets

If the philosophy and goals of curricula represent the guiding principles of the curricula, then the grade-level and course learning targets represent the core of the curricula. Learning targets are concrete goals written in student-friendly language that clearly describe what students will learn and be able to do by the end of a class, unit, project, or course. The content standards adopted by the Board state the specific grade-level expectations as to what each student must know and be able to do by the end of each grade. The team should consider several key questions to identify, select, write, and sequence learning targets:

- Is the target measurable and how will it be measured?
- Is the target sufficiently specific to give students a clear understanding of what they should be able to do?
- Is the target compatible with the goals and philosophy of the curricula and the real, emerging needs of students?
- Is the target realistic and attainable by students?
- · Are appropriate materials and other resources available to make the target achievable?

Curricula teams create the overall K–12 scope and sequence document to show student learning progressions across grade-levels and courses. They assure smooth transitions and curricular coordination among grades and courses, particularly between elementary schools and middle schools and between middle schools and high schools. These learning targets guide the deeper dive into the creation of specific grade and course level documents.

#### Course Information Overview, Unit Development, and Lesson Development

The CSDE has created a Universal Curricula Template to guide curricula teams in the creation of course information overviews, units, and lessons (Appendix A). The Template is color-coded to show alignment to the six curricula design principles, in that all curricula must:

- be aligned and focused on the educational standards. Provides intentional learning targets describing
  what all students should know, understand, and be able to do to achieve future success in college,
  career, and civic life (orange).
- value diversity and include students engaging in real-world culturally relevant experiences, explorations, inquiry, and models (blue).
- provide flexibility for individualization for teachers and students (purple).
- challenge all learners and communicates high expectations and supports learning for historically marginalized students (yellow).
- make explicit connections and links between different subjects/concepts/experiences and the district learner goals, framework, vision or portrait of a learner/graduate (red).

The Template (Appendix A) provides a common framework for curricula teams as they design curricula, assessments, and instruction.

#### Identifying Resource Materials to Assist with Curricula Implementation

An effective curricula includes instructional resources to help answer the question, "What instructional materials are available to help me meet a particular standard, learning target, or set of learning targets?" These materials include a variety of resources and technology. Another question that must be addressed by curricula teams pertains to modifying lessons so that teaching and learning can occur not only in-person but also at a distance or online if necessary, "How will instruction be modified to accommodate learning at a distance scenarios (e.g., blended learning, online learning)?"

# Developing and/or Identifying Assessment Items and Instruments to Measure Student Progress

Various types of assessment guide teaching and learning. There are two types of assessment: formative and summative. Summative assessments are the culminating evaluation of student performance against a set of grade-appropriate standards. Formative assessment is a process used to provide feedback to teachers and students during instruction throughout the year. This process is not a single test, but a series of effective teaching practices that assist teachers in adjusting ongoing teaching and learning to improve students' achievement and mastering grade-level learning targets. Formative assessment includes clarifying the purpose of the learning, providing exemplars so students know what good work looks like, using activities that engage students, and eliciting evidence of their learning. During the formative assessment process, teachers regularly provide feedback that helps students know what they need to do to continue learning, encouraging students to serve as learning resources for one another, and increasing students' ownership of learning.

The statewide mastery examinations are summative and serve as important indicators of student achievement and progress, but they should not drive instruction. They are designed for broad purposes, such as accountability, reporting, and program evaluation. They are not intended to support day-to-day classroom instruction.

The unique needs and strengths of these learners must be considered in the planning of both assessment and instruction, including the provision of supports, accommodations, and modifications as required in a student's Individualized Education Program (IEP), Section 504 plan, or other intervention/learning plan. There is no single assessment that meets the needs of identifying what each student knows and is able to do. Thus, a variety of formative and summative assessment practices must be incorporated into the curricula to assist in answering, "How will I know that my students know and are able to do what is expected of them?"

As assessment drives instruction, it is imperative curricula teams identify and create an assessment process that focuses instruction. The <u>CSDE Sensible Assessment Practices for 2020-21 and Beyond</u> offers guidance to educators and curricula developers on assessment practices.



#### Phase 3: Implementing

#### **Putting the New Curricula into Practice**

Too often, traditional practice includes sending a team away for several after-school meetings and two weeks of summer writing as prelude to a back-to-school unveiling and distribution of the updated or revised curricula. The process envisioned here entails a much more in-depth and systematic approach to both development and implementation. Instead of assuming that the process ends with the publication of new curricula, an effective curricula team continues to oversee the implementation, updating, and evaluation of the curricula.

#### **Providing Professional Learning and Support**

It is important to remember that any innovation introduced into a system — including the new curricula — requires time and support to be fully implemented. Districts and schools must invest in providing professional learning and supports to teachers to develop the knowledge and skills regarding the content and ensure fidelity to the curricula. Teachers need opportunities to become aware of the standards and the new curricula. Teachers need at least two years to implement the new curricula and new resources in their classrooms. It is critical that the curricula development team and district/school administrators are aware of this process and are available to nurture it.



#### **Phase 4: Evaluating**

#### **Monitoring Fidelity of Implementation**

There are varieties of ways in which curricula implementation can be monitored including a review of student work, team learning walks, instructional observations, and coaching conversations. The CSDE has developed various learning walk documents to assist districts and schools in specific "look-fors" that align to standards and evidence-based teaching practices. The purpose of walkthroughs is to assist a team of district and school leaders and educators in gaining a snapshot of the teaching and learning occurring on a certain day, at a certain time, across certain classrooms. Walkthroughs do not determine if a certain program is being implemented effectively or serve as a means of evaluating individual teachers, but rather to assist districts and schools in analyzing teaching practices and learning tasks to increase the inclusion of evidence-based practices that have shown the highest impact in successfully teaching students. Additionally, walkthroughs provide leadership and staff the opportunity to collaborate through shared experiences regarding evidence-based practices. The resulting insights can help clarify and focus the work that is needed to help all students achieve at their fullest potential.

The list below connects to resources identified by the CSDE Academic Office as evidence-based best practices to support districts monitoring the fidelity of curricula implementation:

- The EQuIP Student Work Protocol
- CSDE K-2 Literacy Learning Walk Form
- Math Walkthrough Tool
- CSDE NGSS Walk-thru Observation Checklist/Comment Form

#### **Determining the Success and Impact of the Curricula**

The curricula development cycle ends and then begins again with a careful evaluation of the effectiveness and impact of the curricula. Using surveys, focused discussions, and meetings like those described previously, a curricula development team needs to periodically gather data on perceptions of curricula strengths, weaknesses, needs, and resources that do not seem to be working effectively. This information should be gathered from data that represent overall student performance that is linked closely to daily instruction. Teams of teachers responsible for the specific content could accomplish this by sharing samples of assessments, performance tasks, student work, lessons, and instructional practices related to the curricula. This detailed review and analysis of quantitative and qualitative information on the curricula's impact and on people's perceptions of its strengths and weaknesses forms the foundation for the next round of curricula development and improvement. Additionally, these data can drive professional learning and assist in providing teachers with support.

The list below connects to resources identified by the CSDE Academic Office as evidence-based best practices to support districts in determining the success and impact of local curricula:

- EQuIP E-Learning Modules
- The EQuIP Student Work Protocol
- EQuIP Student Work Annotation Guide

#### Renewing/Revising the Curricula

One of the most common methods of periodically renewing or updating curricula is through grade-level meetings designed to share materials, activities, units, assessments and student work that support the achievement of the curricula goals that were unknown or unavailable when the guide was first developed. These approaches are invaluable professional learning opportunities wherein teachers assume ownership of the curricula they are responsible for implementing. In this way, the guide becomes a growing resource for more effective curricula implementation.

The list below connects to resources identified by the CSDE Academic Office as evidence-based best practices to support districts in the curricula renewal and revision cycle:

- EQuIP Mathematics Rubric
- EQuIP K-2 ELA Literacy Rubric
- EQuIP ELA Rubric
- EQuIP Rubric for Science

## **Appendixes**

The following appendixes are included in this document to assist districts and schools in the curricula process:

#### **Appendix A: Universal Curricula Template**

Appendix A includes three templates to support the evaluation, design and development of curricula materials.

- Part I: Course Information Overview
- · Part II: Unit Development
- · Part III: Lesson Plan/Lesson Sequence Development

The Universal Curricula Template assists districts and schools in approaching the creation of curricula through an equity lens and ensuring all learners engage in focused, rigorous, culturally relevant grade-level content. The Template (Parts I, II, and III) is **color-coded** to show adherence to the core principles:

- Defining intellectual and cognitive rigor with alignment to educational standards (yellow and orange);
- Clarification of what all students should know, understand, and be able to do to achieve future success in college, career, and civic life (orange);
- Opportunities for interdisciplinary connections (yellow);
- Engagement in real-world, culturally relevant experiences, explorations, and models (blue);
- Integrates materials, resources and technology with concepts and learner goals for coherence (pink);
- · Providing flexibility for individualization for teachers and students and opportunities for UDL (purple);
- · Support of anytime/anywhere personalized, student-centered learning; and
- Communicates expectations and design principles for supporting learning for historically marginalized students (blue).

#### **Appendix B: Glossary**

Appendix B defines curricula-related words used in the Template and throughout this document.

**Appendix C: References** 

**Appendix D: CSDE Contacts by Content** 

# **Appendix A: Universal Curricula Template**

## **Part I: Course Information Overview**

Course Title:	Content Area:	Grade Level:
Course Description: Questions that should be answered in a course description include.	:	I
Aligned Core Resources:		
Additional Course Information: Big ideas addressed in the course	Habits of Mind/SEIH/Transferable Skills Addressed in the Course: The skills you want students to master in their journey to success in college, career, and civic life (e.g., initiative, responsibility,	
	perseverance, collaboratio respect).	

<sup>\*</sup>Adapted from Naugatuck Public Schools Curriculum Writing Template

## **Part II: Unit Development**

Refer to  $\underline{\text{the glossary}}$  on page 17 for a defnition of each component of the template.

Unit Overview/Summary — FOCUS:	= Focused	= Coherent
Unit Number:	= Rigorous	= Relevant
Title of Unit:	= Flexible	= Diverse, Equitable, and Inclusive
Duration in Days:	- Flexible	- Diverse, Equitable, and inclusive
Relevant Standards:	Examples	and Explanations:
Transfer Goal:		
Transfer Goal:		
Coherence:		
Essential Questions:	Enduring	Understanding:
EGGIIIII TELESIONE		- The state of the
What Students Will Know:	What Stu	dents Will Do:
Demonstration of Learning:		
	100 th to 1640 the	

## Part II: Unit Development (continued)

Refer to the glossary on page 17 for a defnition of each component of the template.

Unit Overview/Summary — FOCUS: Unit Number: Title of Unit: Duration in Days:	= Focused = Rigorous = Flexible	<ul><li>= Coherent</li><li>= Relevant</li><li>= Diverse, Equitable, and Inclusive</li></ul>
Unit-Specific Vocabulary and Terminology:	Aligned U	nit Materials, Resources, and Technology:

Opportunities for Interdisciplinary Connections:	Opportunities for Application of Learning:	Critical Consciousness for Diversity and Equity:
Supporting Multilingual/English Learners:		
Lessons:	Learning Targets:	

## Part III: Learning Plan/Lesson Sequence Development

Lesson Number:				
Lesson Title:				
Duration (Sessions/Days)	:			
Lesson Description:				
Standards Addressed:		Learning Targets:		
Content standards Interdisciplinary standards CELP				
Crosscutting Concepts				
Tasks:				
Name	Description	Purpose	DOK Level	
Ac		Lesson Terminology/Vo Academic Vocabulary Content Vocabulary		
Guiding Questions:		Anticipated Misconcep	tions:	

## Part III: Learning Plan/Lesson Sequence Development (continued)

Plan for Differentiation or Personal Learning:  How might this unit support all learners that benefit from adaptations and enrichment?	Assessment of Understanding: Readiness, Interim, Formative, Summative Assessments	Opportunity for Student Voice and Choice:	
Materials/Resources/Texts/Speakers	Integration of Technology: Intentionally aligned use of digital tools and resources to support acquisition of content, researching, organizing and communicating learning		
Plan for Virtual Learning (Synchronous):	Plan for Virtual Learning (Asynchron	ous):	
For example: Instead of a brain dump activity, student share words aloud that are written on a chart.	Students create a word cloud.		
Home Links: School to Home Connection to engage families as partners in learning			

Adapted from Naugatuck Public Schools Curriculum Writing Template

## **Appendix B: Glossary**

#### **Curricula Guidance Glossary**

**Academic Vocabulary:** Words that are traditionally used and regularly appear in academic dialogue and text but are not often explicitly taught.

**Application of Learning:** Educational approach whereby students learn by engaging in direct application of skills, theories and models. Students apply knowledge and skills gained from traditional classroom learning to hands-on and/or real-world settings, creative projects or independent or directed research, and in turn apply what is gained from the applied experience to academic learning. The applied learning activity can occur outside of the traditional classroom experience and/or be embedded as part of a course.

Blended Learning: The practice of using both online and in-person learning experiences when teaching students.

**Challenge-based Learning:** An efficient and effective framework for learning while solving real-world challenges. The framework fuels collaboration between students, teachers, families, and community members to identify big ideas, ask thoughtful questions, and identify, investigate and solve challenges.

Content Vocabulary: Words that are specific to a given domain or subject area.

**Culturally Responsive:** Any form of education or teaching that honors learner's cultural capital and incorporates their histories, values, beliefs, and perspectives, including educator's ability and willingness to learn from and relate respectfully with students, and use students' experiences and identities in developing and implementing curricula.

**Curriculum:** Curriculum is different from state and national academic standards in that standards define what students are expected to learn by subject and grade. The curriculum combines how teachers will teach to develop skills, content knowledge and assess students' ability to transfer learning. Curriculum is the central roadmap for communicating essential learning outcomes for mastery by the end of a grade or grade band. The structure and organization of curriculum is guided by a curriculum framework that must include standards aligned concepts, skills, high impact instructional methods, high quality materials and multiple means of assessment aligned to standards.

**Differentiation:** A student-centered instructional model used by teachers to proactively plan with students' differences, as well as their similarities, in mind with the goal of building bridges between critical content and student interests. Differentiation calls for teaching mindfully, and includes the utilization of a wide variety of teaching techniques and lesson adaptations to support the success of students, responding to them as individuals. Differentiation includes the utilization of a wide variety of teaching techniques and lesson adaptations to instruct a diverse group of students, with diverse learning needs, in the same course, classroom, or learning environment.

**Depth of Knowledge:** Degree or complexity of knowledge that the content curriculum standards and expectations require.

**Educational Standards:** The learning goals for what students should know and be able to do at each grade level. Educational standards are not a curriculum. Educational standards are adopted by the Connecticut State Board of Education to guide the development of high-quality curriculum and high impact instruction. Local communities and educators customize and personalize the development of curriculum aligned to the approved educational standards, district needs and portrait of the learner.

**Enduring Understanding:** The major ideas you want students to internalize and understand deeply. These understandings should be thematic in nature. They are not the end all, be all of the question.

**Essential Question:** A question that can be approached in multiple ways. There should be no more than 2-3 essential questions and they should align with your topics. Questions can be repeated throughout a course or over years, with different enduring understandings.

Flexible Learning Pathways: Versatile courses offerings, academic curricula, and learning experiences that individual students complete as they progress in their education toward graduation.

Formative Assessment Practices: Not a single test but a series of effective teaching practices, inseparable from instruction. Formative assessment includes clarifying the purpose of the learning, providing exemplars so students know what good work looks like, using activities that engage students, and eliciting evidence of their learning. During the formative assessment process, teachers regularly provide feedback that helps learners know what they need to do to continue learning, encouraging students to serve as learning resources for one another, and increasing students' ownership of learning.

Habits of Mind: Attributes that human beings display when they behave intelligently.

**Interdisciplinary:** Conscious effort to apply knowledge, principles, and/or values to more than one academic content simultaneously.

**Learning Target:** Concrete goals written in student-friendly language that clearly describe what students will learn and be able to do by the end of a class, unit, project, or even a course.

**Mastery-Based Learning:** Mastery-based learning refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education.

**Multiple Representations:** Referred to as the "what" of learning; Learners differ in the ways that they perceive and comprehend information that is presented to them so providing options for representation is essential.

**Performance-based Learning:** An instructional approach or teaching method that utilize multifaceted projects, requiring diverse skills, as a central organizing strategy for educating students in which students learn by actively engaging in real-world and personally meaningful projects.

**Personalized Learning:** A diverse variety of educational program, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students

**Remote Learning:** Public Act 21-2 defines remote learning as instruction by means of one or more Internet-based software platforms as part of a remote learning model.

Students and educators are not physically present in a traditional classroom environment. Instruction is relayed through technology, such as a learning management system with embedded tools like discussion boards, video conferencing, online assessments, and teacher/administrator dashboards to monitor progress from remote locations.

**Scaffolding:** Variety of instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

**Student-centered:** Instruction that gives students opportunities to lead learning activities, participate more actively in discussions, design their own learning projects, explore topics that interest them, and generally contribute to the design of their own course of study.

**Transferable Skills:** Broad set of knowledge, skills, work habits, and character traits that can be applied in all academic and technical subject areas and are used in all educational, career, and civic settings throughout a student's life. Knowledge, concepts or skills that are transferable between subjects and domains.

**Voice and Choice:** Intentional involvement of students in the development of projects, in definition of goals, resources to learn, time management and products to present to an audience.

## **Appendix C: References**

- ASCD
- CAST
- CSDE Mastery-Based Learning
- Dataworks Educational Research
- EL Education
- National Education Association
- State Board of Education Position Statements
- State Board of Education Position Statement on Culturally Responsive Education
- SUNY
- The Glossary of Education Reform
- Webb, N. (November 2005). Depth of Knowledge levels for four content areas. Presentation to the Florida Education Research Association, 50th Annual Meeting, Miami, Florida
- William. D. (2011). Embedded Formative Assessment. Bloomington, IN: Solution Tree Press.

## **Appendix D: CSDE Contacts by Content**

Irene E. Parisi Chief Academic Officer irene.parisi@ct.gov

#### Academics: Teaching and Learning

Dr. Melissa K. Wlodarczyk Hickey Reading and Literacy Director melissa.hickey@ct.gov

Megan Alubicki Flick
English Learners, Education Consultant
megan.alubicki@ct.gov

**Stephen Armstrong**Social Studies K–12, Education Consultant <a href="mailto:stephen.armstrong@ct.gov">stephen.armstrong@ct.gov</a>

Kyllie Freeman
CTE, Associate Education Consultant
Education and Training
Information and Technology
Hospitality and Tourism
kyllie.freeman@ct.gov

## Suzanne Loud

CTE, Education Consultant
Business Management & Administration
Finance
Marketing
Health Science
suzanne.loud@ct.gov

#### **Harold Mackin**

CTE, Education Consultant
Agriculture, Food, and Natural Resources
Architecture and Construction
Manufacturing
STEM
Transportation, Distribution & Logistics
harold.mackin@ct.gov

**Dr. Ronald Michaels**Science K–12, Education Consultant ronald.michaels@ct.gov

Jennifer Michalek
Mathematics & Computer Science K–12,
Education Consultant
jennifer.michalek@ct.gov

**Dr. Joanne R. White**English Language Arts K–12, Education Consultant joanne.white@ct.gov

#### Academics: School Improvement (Turnaround)

Lisa Lamenzo
Division Director, Turnaround
lisa.lamenzo@ct.gov

Nicole Jones
Teacher in Residence
nicole.jones@ct.gov

Gregory Dresko Education Consultant greg.dresko@ct.gov

Jennifer Webb Education Consultant jennifer.webb@ct.gov

Iris White
Education Consultant
iris.white@ct.gov

