Understanding the Goals of a Competency-Learning System

Using a Block Schedule

Building a System for Deeper Learning

Understanding the Goals of a Competency-Learning System
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:15</td>
<td>Overview of goals for an instructional block schedule for competency education</td>
</tr>
<tr>
<td>9:15-11:30</td>
<td>Strategies for Instruction</td>
</tr>
<tr>
<td>11:30-12:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:30-2:00</td>
<td>Building a classroom that supports student agency and personalized learning</td>
</tr>
<tr>
<td>2:00-3:00</td>
<td>Teacher Planning Time</td>
</tr>
</tbody>
</table>
Resources for Block Schedule

West

https://nhlearninginitiative.libguides.com/manchester

Manchester Libguide
Thinking for Today

- Rethinking practice, routines within a block schedule?
- How does instruction need to change to support deeper learning?
- Leveling up--asking the challenging questions.
- Creating instruction plans within block scheduled time frames.
- Facing the idea of change, shifting to improve student learning.
- Addressing some assumptions about instruction.
- Competency learning goals.
- Opportunity to improve instruction.

Thinking for Today
What are your current assumptions about the benefits of block scheduling?

What concerns/concerns do you have about block scheduling?

What do you hope to learn/accomplish in today’s session?

How are your current practices and structures supporting personalization, collaboration, reflection and performance assessment?

Current practices and structures supporting personalization, collaboration, reflection and performance assessment.
The Tenets of a Competency-Based System

- Students advance upon mastery.
- Competencies include explicit, measurable, transferable learning objectives that empower students.
- Assessment is meaningful and a positive learning experience for students.
- Students receive timely, differentiated support based on their individual learning needs.
- Learning outcomes emphasize competencies that include application and creation of important skills and dispositions.
- As defined by Chris Sturgis and CompetencyWorks.
The Big Ideas of Competency Design

- **Curriculum**: Creativity, interests, and content drive the topics to study.
- **Student Agency**: Students play an active and collaborative role in their own learning.
- **Standards**: Competencies and standards balance each other.
- **Assessment**: Learning and authentic performance expectations focus on feedback for student agency.
- **Instruction**: Instruction shifts to include opportunities for students to apply their learning.
What does CBE look like in the classroom?

<table>
<thead>
<tr>
<th>1. Recognition of Learning</th>
<th>takes place in the classroom. It is based on the mastery of specific learning targets—rather than a student’s level of participation, effort, or time in the classroom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Learning Targets</td>
<td>Learning targets are explicitly shared with students, and based on rigorous college and career readiness standards. Students are expected to participate, effort, or time in the classroom.</td>
</tr>
<tr>
<td>3. Instructional Approaches</td>
<td>Instructional approaches support students’ readiness to exercise independence and take responsibility for their own learning. Activities that take place outside of the school building and school day. Learning targets are explicit, shared with students, and based on rigorous college and career readiness standards.</td>
</tr>
<tr>
<td>4. Assessment for Learning</td>
<td>Assessment for learning offers students flexibility and choice in when and how they show what they learned.</td>
</tr>
<tr>
<td>5. Pacing and Progression</td>
<td>Instructional pacing and supports are individualized to each student’s needs, are relevant and varied, and offer students flexibility and choice in when and how they show what they learned.</td>
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<tr>
<td>6. When and Where Learning</td>
<td>Learning targets are explicit, shared with students, and based on rigorous college and career readiness standards. Students are expected to participate, effort, or time in the classroom.</td>
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American Institutes for Research
What we know...

• What has shifted is what we use for evidence of learning.
  • Focused on content/knowledge, skills, and understanding.
• Guiding structures need to be in place to support competency.
• Units of study need to be more interdisciplinary.
• Professional practice needs to be more collaborative.

What has shifted is what we use for evidence of learning.
What are the goals for a block schedule?

<table>
<thead>
<tr>
<th>1. Learning Cycle Model</th>
<th>2. Constructivism</th>
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<tbody>
<tr>
<td>earning credit for advancing, and requires them to show what they have learned before giving students flexibility for taking more or less time to learn.</td>
<td>shows what they learned, offers students flexibility and choice in when and how they are individualized to each student’s needs, are relevant and valued, and offer students ample opportunity to exercise independence and take responsibility for their own learning.</td>
</tr>
<tr>
<td></td>
<td>is an approach to curriculum which allows students to construct their own meaning from experiences provided by the teacher. The approach leads to deeper understanding of the content by the student.</td>
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<td></td>
<td>for that discipline: to include what is essential in the curriculum as foundational student growth. Content needs to be selected carefully so as to align with a seamless process of targeting, planning, and assessing.</td>
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<td>gives students flexibility for taking more or less time to learn.</td>
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Making Meaning Protocol

Groups 4 or 5

What do you see?

What questions does this text raise for you?

What is significant about this text?

How does instruction need to change to support deeper learning?
Learning Cycle Model

- is a seamless process of targeting, planning, and assessing student growth.
- Content needs to be selected carefully so as to include what is essential in the curriculum as foundational for the discipline.
- Carefully select expectations and identify content.
- Design appropriate strategies for collection and feedback (assessment tools).
- Immerse students in learning activities that will explore content and develop targeted skills.
- During learning process, data are collected on how students are progressing toward standards; this information is valuable to teachers and students in assessing student achievement.

Learning Cycle Model
Constructivism is an approach to curriculum which allows students to construct their own meaning from experiences provided by the teacher. The approach leads to deeper understanding of the content by the student.

- Students become actively engaged in learning.
- Students develop higher-level thinking skills.
- Students gain ownership of their learning.
- Students can make connections between what they are learning and the real world.
- Students can improve their social and communication skills.
- Students become actively engaged in learning.
| E | Engagement - students' prior knowledge accessed and interest engaged in the phenomenon, idea, or concept. |
| E | Explanation - students generate an explanation of the phenomenon. |
| E | Exploration - students participate in an activity that facilitates conceptual change. |
| E | Elaboration - students’ understanding of the phenomenon, idea, or concept challenged and deepened through new experiences. |
| E | Evaluation - students assess their understanding of the phenomenon, idea, or concept. |

Each phase of the model and a short phrase to indicate its purpose are:

The five phases are designed to facilitate the process of conceptual change. The use of this model brings coherence to different teaching strategies, provides connections among educational activities, and helps teachers make decisions about interactions with students.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity Criteria</th>
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</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Students' prior knowledge accessed and interest engaged in the phenomenon, idea, or concept. Students mentally engage students with an activity or question.</td>
</tr>
<tr>
<td>Exploration</td>
<td>Students participate in an activity that explores a phenomenon or concept. Students acquire a common set of experiences that they can use to help each other make sense of the new concept or skill.</td>
</tr>
<tr>
<td>Explanation</td>
<td>Students generate an explanation of the phenomenon, idea, or concept. Only after students have explored the concept or skill, does the teacher provide the concepts and terms used by students to develop explanations for the phenomenon or concept experienced.</td>
</tr>
<tr>
<td>Elaboration</td>
<td>Students' understanding of the phenomenon, idea, or concept challenged and deepened through new experiences. It is important for students to discuss and compare their ideas with each other during this phase.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Students assess their understanding of the phenomenon, idea, or concept. Students provide evidence for changes to their understanding, beliefs, and skills. Students provide an opportunity for students to review and reflect on their learning and new understandings and skills.</td>
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5 E's Model
Assessment for Learning

- Offers students flexibility and choice when and how they show what they learned.

Formative assessment is a process used by teachers and students during instruction to gather evidence of student learning. Each student receives feedback that will improve student achievement of intended instructional outcomes; descriptive feedback specific to each task.

- Creates a supportive and cooperative classroom. In this environment, everyone, including the teacher, should feel able to try new things without worrying that they might fail.

- Creates a sense of self-efficacy (a learner's confidence in their ability to reach targets through hard work and determination). This is an essential quality for learners to develop. Self-efficacy will help them succeed throughout their life.

- Creates a supportive and cooperative classroom. In this environment, everyone, including the teacher, should feel able to try new things without worrying that they might fail.

- Creates a supportive and cooperative classroom. In this environment, everyone, including the teacher, should feel able to try new things without worrying that they might fail.
Pacing and Progression

Gives students flexibility for learning, allowing them to take more or less time to learn and requires them to show what they have learned before earning credit or advancing.

- Learning happens when students are given opportunities to build upon previous knowledge and experiences.
- Research consistently shows that only telling learners what they need to know is much less effective than helping them construct meaning for themselves.
- Readiness for assessment is based on the formative work and the teacher's judgment.
- Students progress after producing evidence of mastery.
Assessment Considerations

Formative
- Measures accuracy, completeness and application
- Depth of Knowledge levels 1-2
- Students are asked to recall, reproduce, and apply content knowledge and skills

Summative Assessment
- Measures competency
- Opportunities for students to demonstrate all Depth of Knowledge levels 1-4
- Students are asked to be independent and to apply their knowledge, understanding, and skills consistently and in unique ways
<table>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Use these CRPE Curriculum Exemplars with math/mathematics</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td>Webb's Depth of Knowledge and Cognitive Process Dimensions</td>
</tr>
<tr>
<td><strong>Deadline</strong></td>
<td>Weeks 2, 3 &amp; 4</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Login to the Blount Cognitive Process Dimensionalizer</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Webb's CRPE (Math-Science CRM)</td>
</tr>
</tbody>
</table>

**Key Features**
- **Depth of Knowledge Levels**
  - **Remember**: Recalling facts or concepts
  - **Understand**: Interpreting information or applying concepts
  - **Apply**: Using concepts in new situations
  - **Analyze**: Evaluating information, identifying patterns, and making inferences
  - **Evaluate**: Making judgments about the validity of ideas, methods, and solutions
  - **Create**: Generating new ideas, products, or methods

**Examples**
- **Remember**: Identifying key concepts in a lesson.
- **Understand**: Interpreting a complex mathematical problem.
- **Apply**: Solving a real-world problem using algebraic concepts.
- **Analyze**: Comparing and contrasting different mathematical theories.
- **Evaluate**: Assessing the effectiveness of different strategies in solving a problem.
- **Create**: Designing a new mathematical model or algorithm.
Curriculum Focus for the Block

1. Determine the key units of study for the first (Semester)
2. Identify the Knowledge, Understanding, and Skills (what students will need to do to demonstrate competency)
3. List the evidence that you will accept for this understanding
4. Determine the varied ways students will acquire content
5. Knowledge concepts and ideas
6. Progress? Identify the formative assessments (What does progress look like?) that will give you the best information about learner understanding

Determine the activities that will help students understand
Planning for the Block

1. Identify routine activities for each day (short/extended)
2. Map out the time you will need for the unit (short/extended)
3. Determine what needs to be practiced
4. Determine what needs to be acquired for acquiring content and other strategies
5. Create a learning line of what you need as evidence of a student making progress
6. Match activities that need extended time to block days
Understanding key Instructional Strategies for the Block Schedule

Building a System for Deeper Learning
Nurture a Culture of Learning and Inclusivity

Don’t underestimate the importance of culture – the underlying values, beliefs, rituals, and relationships that shape an organization or community. Many schools and districts are making the same mistake when they focus on the structural or technical changes without first paying attention to culture. Chris Sturgis, CompetencyWorks

Nurture a Culture of Learning and Inclusivity
With a partner discuss opportunities students have to innovate, assume leadership roles, learn outside the classroom, and co-design their learning.

- Student Government
- Advisory
- Student Media
- ELO
- Co-Curricular

How does your whole school culture foster personalization, collaboration, reflection, performance assessments and authentic learning?
Howard Gardner's multiple intelligences—Varying the learning modalities:

- Kinesthetic
- Visual
- Auditory

Learner-Centered Instruction

Schedule=

Block

CompetencyWorks Graphic: Redesign

Process:
- Feedback (product and process)
- Specific, accountable, diagnostic assessment
- Differentiated learning

Supports:
- Flexible student
- Targets enable timely
- Grouping needs and

Expanded student talk

Understandings
- Inquiry and conceptual
- Discovery-based mini-lecture

Explicit teaching of
- Skills and strategies

Multiple Modalities, Flexible Grouping, and Impact Strategies

Learner-Centered Instructional Design:
CompetencyWorks Graphic: Redesign

Design Elements of Competency-based Units of Study: Engagement, Access, Rigor

Competency-Based Training

- Needs
- Passions
- Experiences

Learners address all experiences.

Curiosity, Competence and Agency

Learner experiences address all learners.

Universal Design

Units are modular. Scarcely scaffolded. Built with well-defined performance tasks.

Student-Choice: Student-Driven

Challenging, engaging, meaningful opportunities for student choice.

Learning Cycle

Endless nonlinear application and extension of learning cycles that drive learning. Unit-based learning cycles.

Inquiry

Learning and assessment as inquiry-driven. Unit design reflects assessment as inquiry.

Design Elements of Competency-based Units of Study: Engagement, Access, Rigor

Schedule

Block
The teachers and students wanted a personalized, performance-based approach to learning.

An Example...

- Humanities
- Civic Responsibility
- Critical Thinking
- Argumentative/Persuasive
- Knowledge/Ideas
- Authentic Application
Proposals to Improve Souhegan

Essential Question: How can students be active participants in their democracy to improve SHS?

As a student at Souhegan High School, you have a unique opportunity for your voice to be heard. During this year, you learned about Community Council, which was founded in 1992 during Souhegan’s first year of service. Its task was, and remains to this day, to discuss and vote on various proposals concerning student life, school initiatives, disciplinary procedure, grading procedure, and any other matter of importance to the school community. Council is purposely diverse and purposefully student-led. Its members outnumber the adults two to one. Basically, if there is something that you think could make Souhegan better for your fellow students, there is no reason for you to not try to change it.

So that is exactly what we are going to do during this project. You will be an active participant in your democracy, and you will attempt to take an active role in trying to enact change.
With a partner, discuss what a unit would look like where students are active participants in affecting school change. Brainstorm.
Understanding the importance of Student Agency in a Block Schedule

Building a System for Deeper Learning
With a partner discuss what this looks like now and what it might look like in the future in your classroom? In the school? In the community? Be prepared to share your ideas...

How do we put the student at the center of their learning? What does that look like?
<table>
<thead>
<tr>
<th>Passive Learning opportunities</th>
<th>Active Learning opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Segmented Curriculum</td>
<td>Integrated Curriculum</td>
</tr>
<tr>
<td>Looking for the right answer</td>
<td>Developing thinking</td>
</tr>
<tr>
<td>Content-focused</td>
<td>Application-focused</td>
</tr>
<tr>
<td>Learn to do</td>
<td>Learn to learn</td>
</tr>
<tr>
<td>Standardized approach</td>
<td>Personalized, differentiated</td>
</tr>
<tr>
<td>Classroom Learning</td>
<td>Learning anytime/anywhere</td>
</tr>
<tr>
<td>Teacher-centered</td>
<td>Student-centered</td>
</tr>
<tr>
<td>“Deliver” Instruction</td>
<td>“Facilitate” Learning</td>
</tr>
</tbody>
</table>

Transforming Teaching: Student Agency

<table>
<thead>
<tr>
<th>Low Student Agency</th>
<th>High Student Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Approach</td>
<td>Transformed Approach</td>
</tr>
</tbody>
</table>
What does it mean to be a 21st century learner?

In tomorrow's world?

What skills are needed for our students' success?
Top 10 Skills

Source: Future of Jobs Report, World Economic Forum

In 2015

1. Creativity
2. Critical Thinking
3. People Management
4. Coordination with Others
5. Negotiation
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Quality Control
10. Active Listening

In 2020

1. Cognitive Flexibility
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Quality Control
10. Active Listening
The Top 5 Skills Employers Seek, In Order of Importance:

1. Ability to work in a team
2. Ability to make decisions and solve problems
3. Ability to plan, organize and prioritize work
4. Ability to communicate verbally with people inside and outside an organization
5. Ability to obtain and process information

Order of Importance:
The Top 5 Skills Employers Seek,
THEORY OF ACTION DL: WORK STUDY PRACTICE IMPROVEMENT

PRACTICE IMPROVEMENT

- Explicit involvement of local education leaders in implementing work-study practices
- Explicit involvement of school leaders in organizing learning and fostering positive change by supporting internally driven modifications
- eProtocol support for local races and districts, including technical policies and protocols
- Use of competency-based learning and assessment of performance, including high-quality performance assessments and rubric assessments included in the curriculum, instruction and content representation of the new and restructured the roles and responsibilities of administrators, teachers and students
- Progress towards parent-student-student feedback and feedback from students and teachers on student progress
Initiate and manage my learning through self-awareness, self-motivation, self-control, self-advocacy and adaptability as a reflective learner.

Use various media to interpret, question, and express knowledge, information, ideas, feelings, and reasoning to create mutual understanding.

Work in diverse groups to achieve a common goal.

Use original and flexible thinking to communicate my ideas or construct a unique product or solution.

Initiate and manage my learning through self-awareness, self-motivation, self-control, self-advocacy and adaptability as a reflective learner.

Nh Work Study Practices
Embedding Work Study Practices
Metacognition
Co-Design... Two-pronged approach...
Co-Designed Learning

Agency

Equity

What is our end-goal?

...Co-Designed...
Where are students having the opportunity to "co-design" what their learning experiences consist of?

Where are there exhibitions or demonstrations of their learning?
Activity: Digging in...

Please consider, in an upcoming unit, where your students are able to take more ownership in their learning. Let’s revisit this unit or these activities through the lens of “co-design” to include student exhibitions and/or demonstrations of learning.

Activity: Digging in...