

Magnetic High School Curriculum Building Toolkit

- ✓ Chunk the content.
- ✓ Use graphic organizers so students see what they are learning.
- ✓ Sequence instruction so students get a clear foundation and expand on that base.
- ✓ Give students “scaffolds” to organize their learning.
- ✓ Give students choices of kinds of activities to complete.

“Locate, collect, organize, and use information from various sources to answer questions, solve problems, and communicate ideas.”

Take Illinois Learning Goal 5 across the curriculum to increase learning now and prepare for college and career success.

The Competence Focus

Competence or skill.

What's the difference?

Think what it means to say,

"I am learning this skill for that test" vs. "I am developing this competence for a career."

It is a simple and deep change.

Simple and Deep

Richard Strong, Harvey Silver, and Matthew Perini, "Keeping It Simple and Deep,"
Educational Leadership, March 1999.

Changes that are simple have three elements.

- Simple changes are not radical, revolutionary, or mold breaking. They are constructed out of the educational resources and knowledge that teachers currently possess.
- Simple changes do not create conflicts between the modes of instruction, curriculum, and assessment and the policy environment of state mandates and tests.
- Simple changes respect the practicalities and resources of schools. They do not call for radical shifts in school structures or budgets.

If these simple guidelines stand alone, they might seem like a prescription for no change at all. Something very different occurs, however, if we combine them with guidelines for educational depth.

Deep changes also have three elements:

- Deep changes affect the entire faculty. They are not constructed around large general sessions, complicated representative structures, or turnkey programs.
- Deep changes combine agreements about unified assessment with a complementary commitment to diversified teaching and administration. In this way, they are profoundly democratic. Like the US Constitution, they combine a set of minimal common agreements with a deep respect for a culture's ability to foster and learn from diversity.
- Deep changes are constructed through a continual process of examination and reflection rather than on strategic long-range planning models.

A SIMPLE AND DEEP STANDARDS-BASED CURRICULUM AND ASSESSMENT SYSTEM

A Competence Based System with an emphasis on

- Writing to Clarify
- Doing to Demonstrate

Competence: The ability to apply knowledge.

“A learner who understands can explain.” (Understanding by Design.)

A learner who is competent can demonstrate.

- Content plus explanation = competence demonstration.
- Content plus application = competence demonstration.

The Curriculum

1. Teacher identifies the central content.
2. Teacher chunks the content into segments
3. Activities develop that content.
Activities include the same kinds of projects or test-like questions that will be used to assess. Activities include a variety of kinds of learning styles. Students have the opportunity to select activities that fit their learning styles and interests both for in-class work and homework. While we respect and support individual learning styles, teachers expand student learning competencies by introducing scaffolded projects that they work on collaboratively with other students.

Writing is a central tool for learning and assessment. Students maintain learning logs, complete weekly reports on what they have accomplished, and produce work that combines writing, graphic organizers, and illustrations. Each student receives a competence “toolkit” that guides this writing.

Assessment

Each week:

- Teacher lists the requirements for competence credit.
- Students complete requirements to gain credits.

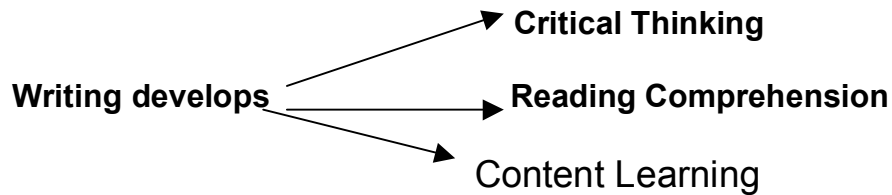
Every five weeks and at end of quarter:

- Students complete comprehensive assessment, which includes all the credits completed and a project, test, or report of what was learned.

Student Responsibility

- Students keep track of the requirements.
- Students recognize the schedule for success.
- Students are responsible for their own progress.

The Writing Connection



There is clear evidence that activities involving writing (any of the many sorts of writing) lead to better learning than activities involving reading and studying only. To improve the teaching of writing is also to improve the quality of thinking required of students....

[How Writing Shapes Thinking](#)

Research has established a powerful relationship between the opportunity to write and the ability to read.

Learning logs help students reflect what they have learned. The goal is not to repeat what the book or teacher said. Rather, the student is expected to connect new material with previously learned material.

[Becoming a Nation of Readers](#)

How to restate a standard as a competence.

Competence	Explanation	Application
State the standard as a “know how” to use “know what”— Application of concept or strategy.	Give students a specific direction to explain the “know what”	Set up activity options—ways to apply the know what with “know how”.

Competence	Explanation	Application
Know how to use themes of geography to analyze a place.	Write an explanation you would give to an elementary student—what are these themes and how do you use them?	List or draw at least one Chicago feature that fits each theme. Then tell what you understand about Chicago because you looked at it this way. OR Map a place. Make a key showing the five themes in that place.

Competence	Explanation	Application
This example fits any math content.	Write an explanation you could use to help you remember how to do this on an open-note test. Write a page for a textbook. Add a real-world example to our textbook.	Solve today’s problem. Or Make up an example of this kind of problem. Or Here’s an example of someone who made a mistake trying to solve this kind of problem. Fix the mistake.

The Competence System for Your Students

How will you clarify the content?

Use the following charts to “map” the year and then make blueprints for each unit.

How will you communicate requirements?

Give students the responsibility of keeping track of competence requirements.

How will you report competence status?

Give students the opportunity to maintain a competence progress log so they see where they are and what they can do to meet requirements.

Start with the Standards and think BIG—think about what your students will know and be able to do at the completion of the course.

Outcomes and Assessments for _____ (subject)

Goal	Standards	Performance Descriptors	Assessments
			<ul style="list-style-type: none"> ✓ Make glossary ✓ Make guide ✓ Make graphic organizer ✓ Write to explain ✓ Illustrate and annotate the topic

Reading and Writing Competencies

	Standards	Performance Descriptors	Assessments
Word Knowledge	1A can apply word analysis and vocabulary skills to comprehend selections.		<ul style="list-style-type: none"> ✓ Make glossary ✓ Demonstrate word attack skills of the quarter in reading aloud and/or guide
Reading Comprehension	1B Can apply reading strategies to improve understanding and fluency. 1C Can comprehend a range of reading materials. 5A locate, organize, and use information from various sources to answer questions, solve problems, and communicate ideas		<ul style="list-style-type: none"> ✓ Answer questions. ✓ Make graphic organizer to show relationships in text. ✓ Write about a text. ✓ Illustrate a text.
Fluency	1B Can apply reading strategies to improve understanding and fluency.		<ul style="list-style-type: none"> ✓ Read with appropriate expression and rate. ✓ Set and reach fluency goal.
Writing	3A can use correct grammar, spelling, punctuation, capitalization and structure. 3B can compose well-organized and coherent writing for specific purposes and audiences.		<ul style="list-style-type: none"> ✓ Write a _____ ✓ Write guide to writing with this quarter's elements.

Math Competencies

	Standards	Performance Descriptors	Assessments
Number Sense and Operations	6A demonstrate knowledge and use of numbers and their many representations in a broad range of theoretical and practical settings. 6B investigate, represent, and solve problems using number facts, operations and their properties, algorithms, and relationships. 6C compute and estimate using mental mathematics, paper-and-pencil methods, calculators, and computers		<ul style="list-style-type: none"> ✓ Make glossary ✓ Make guide to operations of the quarter. ✓ Solve problems
Measurement	7A can measure and compare quantities using appropriate units, instruments, and methods. 7B estimate 7C Solve problems		<ul style="list-style-type: none"> ✓ Make glossary ✓ Make guide ✓ Solve problems
Math Patterns/ Algebra	8A describe numerical relationships using variables and patterns. 8B interpret and describe numerical relationships using tables, graphs, and symbols. 8C Solve Problems 8D Solve algebra problems		<ul style="list-style-type: none"> ✓ Make glossary ✓ Make guide to algebra of the quarter. ✓ Solve problems
Geometry	9A demonstrate and apply geometric concepts involving points, lines, planes, and space. 9B identify, describe, classify and compare relationships using points, lines, planes, and solids 9C construct convincing arguments and proofs to solve problems 9D Solve problems		<ul style="list-style-type: none"> ✓ Make glossary ✓ Solve problems ✓ Make geometry guide
Data Collection and Analysis	10A organize, describe and make predictions from existing data. 10B formulate questions, design data collection methods, gather and analyze data, and communicate findings 10C determine, describe and apply the probabilities of events.		<ul style="list-style-type: none"> ✓ Make glossary ✓ Solve problems ✓ Make data analysis guide ✓ Organize data project

Map the Year: Teaching/Learning Calendar

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Theme/ Concepts				
Skills/ Strategies				
Kinds of Activities and Projects				
How to Assess				

CALENDAR OF LEARNING PROGRESS

A Grid to Identify Processes and Content *Emphasized* each Quarter

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Content Focus List the major theme/focus for each quarter				
Key Content				
Strategies Goal 5 Work Keys	outline chart map table index table of contents	<ul style="list-style-type: none"> • time-line • graph • diagram 	Apply organizers to more complex information.	Apply organizers to more complex information.
Kind of Activities and Projects	<p>Write and illustrate to explain Take notes Paraphrase text</p> <p>Organize to exhibit—use organizer to show content</p>	<p>Write and illustrate to clarify Write summaries</p> <p>Organize to clarify: use organizer to show relationships</p>	<p>Write and illustrate to communicate Write text with focus and support</p> <p>Organize to expand: use organizer to relate what you learned before to what you learned now</p>	<p>Write and illustrate to synthesize Write synthesis of topic.</p> <p>Organize to synthesize: use organizers to communicate what's important</p>
How to Assess—the Activities and Projects will provide an assessment basis. Also, use vocabulary to assess—and clarify learning	Start “word bank” for content terms Write with key words	Classify vocabulary Make glossary Expand “word bank” and writing with key words	Classify and analyze new words Continue glossary, dictionary, word bank, writing with key words	Continue to expand with new words, glossary, dictionary, word bank, writing with key words.

Teaching/Learning Calendar—Example

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Content Concepts/ Theme	Discoveries	Structure and Function	Causes and Effects	Choices and Changes
Skills/ Strategies	Complete chart Complete/analyze sequence chart Locate and classify information	Diagram Compare Contrast Summarize	Make/Interpret Flow chart Predict outcomes Evaluate	Synthesize
Kinds of Activities and Projects	Write your own guide Make a glossary	Make a presentation Write multiple choice questions	Write and illustrate a topic	Teach a topic
How to Assess	Project—Student chooses one of three options Write with this quarter's words	Project: Student chooses one of three options Write to explain this quarter's most important idea	Project: Student chooses one of three options Write to explain a topic	Make your own version of a textbook section for younger students

World History Curriculum Framework DRAFT 7/1/04

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Theme and concepts	Where, When, Why? (Govt.) --Place: Human Interaction, region, economy, movement, location --civilization: economy etc. --culture --the city --forms of govt. --power	Who's In Charge? (Social) Place Region Location Movement Human Interaction Religion/ values Individualism Art Secularism	Conflict and Change Place Region Location Movement Human Interaction Conflict Economic systems Territory Racism	What Went Wrong? What's Next! New Strategies Old Roots Place Movement Location Region Human environment Interactions "ISMS" New problems old roots
Content	Chicago Mesopotamia Egypt Ancient Greece Old Rome China India Ancient Africa- Mali etc. Feudal system Middle Ages	Islam— political/religious Catholic— political/religious Crusades Black Death Renaissance Humanism Reformation Scientific Revolution Printing press Enlightenment	Age of Exploration Trans Atlantic Slave Trade Revolution Imperialism Latin America	WWI Great Depression WWII Cold War Africa--end of Colonialism China Middle East
Strategies	Notes Time line Diagram Map Chart Venn diagram	Primary Source Visual symbol	Debate Simulations	Jigsaw Presentation
Assessment	Travel Brochure Children's Book	Visual representation --model --political cartoon	Student atlas Position paper	News report (front page) News analysis with cause/ effect timeline across history

*Developed by teachers from Clemente, Community Links, and Second Chance High Schools through the Magnetic Schools Institute, funded in part by the Illinois Department of Human Services.
 DePaul University Center for Urban Education and Economics Department*

Organize the Unit

<p>Theme/ Concepts</p>	<p>Standards:</p>
<p>Content</p>	
<p>Skills/ Strategies</p>	<ul style="list-style-type: none"> • Identify important information • Locate and classify information • Compare and contrast • Summarize
<p>Kinds of Activities and Projects</p>	<p>List information relating to a question or topic Make chart Make Venn Diagram Write a summary Make a glossary Make up multiple-choice questions.</p>
<p>How to Assess</p>	<p>Individual Choice: Student chooses one of three options ___graphic organizer with explanation ___write guide ___ _____</p> <p>All students: Write _____with this quarter’s vocabulary.</p> <p>Test—including open-ended and multiple choice questions</p>

Use a mastery model for assessment

—students should reach competence by producing work that is complete, correct, and clear.

Meet the standard:

Check your work—make sure it is

✓ complete ✓ correct ✓ clear

Exceed the Standard:

Write about what you learned.

How do you assess?

<i>Learn—or Assess Assessment if done independently</i>
<p>VOCABULARY</p> <ul style="list-style-type: none"> <input type="checkbox"/> Draw words or pictures to explain vocabulary. <input type="checkbox"/> Match words/pictures/words. <input type="checkbox"/> Chart word-picture-word or word/synonym or word/antonym. <input type="checkbox"/> Write sentence with word. <input type="checkbox"/> Choose word to complete sentence. <input type="checkbox"/> Make/complete prefix-suffix chart or guide.
<p>READING COMPREHENSION</p> <ul style="list-style-type: none"> <input type="checkbox"/> Draw pictures of: characters, setting, situation. <input type="checkbox"/> Construct and explain graphic organizers: list, chart, time-line or sequence chart, map, diagram, web. <input type="checkbox"/> Answer multiple choice question; justify choice. <input type="checkbox"/> Make up question. <input type="checkbox"/> Sequence events. <input type="checkbox"/> Write or match adjectives to characters, place. <input type="checkbox"/> Write or match sentences that describe or explain _____. <input type="checkbox"/> Infer characteristics, motives, prior actions, next action. <input type="checkbox"/> Summarize. <input type="checkbox"/> Identify the main idea or theme, explain its basis in text. <input type="checkbox"/> Write the next part. <input type="checkbox"/> Write letter or diary from someone who was there. <input type="checkbox"/> Think out loud. <input type="checkbox"/> Reading Route—write steps taken to answer a question. <input type="checkbox"/> Apply strategy to a variety of texts. <input type="checkbox"/> Explain how writer organized the text. <input type="checkbox"/> Synthesize in pictures and writing.
<p>MATH</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apply math. <input type="checkbox"/> Write math—examples, explanations, “Math Path”. <input type="checkbox"/> Make up math problems. <input type="checkbox"/> Make math glossary.
<p>CONTENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> List information <input type="checkbox"/> Draw pictures that show facts about this topic. <input type="checkbox"/> Construct and explain graphic organizers. <input type="checkbox"/> List important words and explain them. <input type="checkbox"/> Give facts that support an idea. <input type="checkbox"/> Give or choose an idea that facts support. <input type="checkbox"/> Write a paragraph, poem, booklet, letter about topic. <input type="checkbox"/> Construct choice questions about topic.
<p>WRITING</p> <ul style="list-style-type: none"> <input type="checkbox"/> Write with focus, organization, support, coherence, clarity. <input type="checkbox"/> Edit writing. <input type="checkbox"/> Write in a variety of formats with the same style. <input type="checkbox"/> Write about the same topic in a variety of styles. <input type="checkbox"/> Make punctuation and grammar guide <input type="checkbox"/> Make Writer’s Guide—explain how to write.

Use Varied Activities that Provide Performance-Based Opportunities to Assess Formatively Every Day and Each Week

Lesson Starters

Use this week's words in sentence	Three question quiz —choose one, answer it	Idea of the day—draw it
Vocabulary Match—words to synonyms (or antonyms)	Today's problem—solve it.	Describe _____
Answer multiple choice questions, pair to compare	Read silently a selection, answer a question about it.	Answer "what if" question.
Student "digest" of yesterday's learning.	List reasons why _____	Draw a picture of _____

Activities and/or Assessments

Make a chart of _____	Write a letter from _____ to _____
Take notes about topic, exchange.	Make a glossary of important words
Scan text to locate information	Use today's words in sentence
Outline the topic	Write an explanation of _____
Re-read to find _____	Locate and classify information about _____ in these categories: _____
Summarize the _page _topic _chapter	Make up challenging open-ended question—give to other student.
Write an explanation/guide to _____	Make your own version of our textbook chapter for younger students.
Make up multiple-choice questions	Make a flow chart of _____
List _____	Correct/edit _____ for accuracy.
Prepare a lesson YOU teach about _____	Correct/edit _____ for grammar.
Write the next part of the story.	List the steps to _____
Compare ___ and ___ in a Venn Diagram	Role play _____
Make a map of _____	Make a model of _____
Make a causes-effect diagram of _____	Draw the characters.
Illustrate _____	Make a web to show _____
Graph the _____	Write an explanation of this graph.
Make a time-line of _____	Add adjectives to a paragraph.
Write what people might have said about this event when it happened.	Write a tv news report about _____

Make Public Lesson Plans

Competency Calendar Weeks _____ to _____

Course: _____ **Teacher:** _____

Goals/Outcomes:

WEEK	Focus	Work for Competence	Points

TOTAL _____

Comprehensive Assessment --Week of _____

Written Report _____ *Test* _____ *Demonstration* _____

Example: MATH Competence Calendar Weeks _____ to _____

Course: _____ Teacher: _____

GOALS/OUTCOMES (ILS):

Week	Focus	Work for Competence	Possible Points	Actual Points
		make a _____ __ quiz __ notes __ solve problem, explain how -- _____		
		__ make a _____ __ quiz __ notes __ solve problem, explain how -- _____		
		__ make a _____ __ quiz __ notes __ solve problem, explain how -- _____		
		__ make a _____ __ quiz __ notes __ solve problem, explain how -- _____		
		__ make a _____ __ quiz __ notes __ solve problem, explain how -- _____		

TOTAL POINTS: _____

PLUS Comprehensive Assessment

__ Common Department Test ____ make "math guide"
__ demonstrate/teach this math

Possible Comprehensive Points: _____ Actual Points: _____

TOTAL CREDIT POINTS: _____

Display each week's plan to make the agenda clear.

Learning Calendar **Week of** _____

Focus of the Week: _____

DAY	FOCUS	Competence Development	Competence Credits