

MAPPING CURRICULUM AND ASSESSMENT FOR THE 21ST CENTURY LEARNER

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1

Our Essential Questions

How do we prepare our
learners for their future?

How can we design
curriculum and
instruction to support the
contemporary student?



Learners Create and Share
Knowledge Differently from
Previous Generations



The new literacies : **DIGITAL
MEDIA
GLOBAL**



GLOBALLY STANDARDS
an opportunity to modernize

5

WE HAVE AN
OPPORTUNITY

6

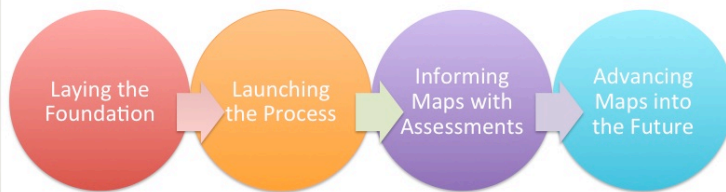
STEM/STEAM/ HUMANITIES

Common Core

21st Century Learning



7



FOUR PHASES

Implementation Process

8

WHERE IS YOUR FACULTY?

- PHASE I: Background on CCSS
- PHASE II: Curriculum Mapping
- PHASE III: Culture of Collaboration
- PHASE IV: Curriculum21



9

GREEN FLAG

Culture of Collaborative Inquiry
Culture of Strategic Communication



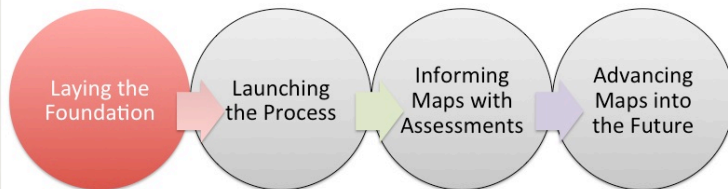
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RED FLAG

Culture of Compliance



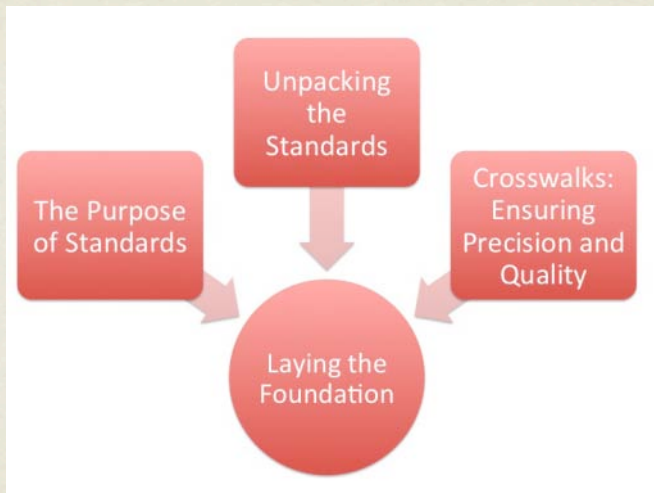
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PHASE I

Laying the Foundation

12



13

I. LAYING THE FOUNDATION

Setting up leadership team in each building to LEARN the Fundamentals:

- Unwrapping the Core Standards
- The Prologue to Mapping



14

COMMON CORE STANDARDS- BASICS

- They do not tell you WHAT to TEACH, WHEN to TEACH, HOW to TEACH
- They are proficiency targets not curriculum.
- Standards do not suggest best practice.
- The CC standards potentially can raise practice.
- Designed for State and Local Decision Making
- Rigorous and world vetted



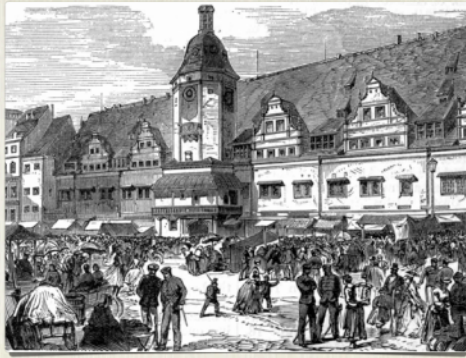
15



TOWN COMMON

The meeting place of our early American

16



A MARKETPLACE

For sharing and for choice

17



Norman Rockwell's

Freedom of Speech

from this Four Freedoms
Series

Painted at a Town Hall
Meeting

18



COMMON CORE STATE STANDARDS

<http://corestandards.org>

19



WHY STANDARDS?

- Establish a "staircase" of increasing complexity in content and skills across the grades and subjects
- Provide building blocks for successful classrooms
- Ensure a consistent core curriculum for all students

20

ORGANIZATIONAL MARKERS

- In ELA- take one set of standards and begin by identifying the organizational headers as ANCHORS.
- In Math- examine the headers K-8 as ANCHORS.
- In Math- examine the headers within each area of focus.
- ALL FACULTY should be familiar with these anchors whatever subject area they teach.



21

COLLEGE & CAREER READINESS CLIS

- 1) They demonstrate independence.
- 2) They build strong content knowledge.
- 3) They respond to the varying demands of audience, task, purpose, and discipline.
- 4) They comprehend as well as critique.
- 5) They value evidence.
- 6) They use technology and digital media strategically and capably.
- 7) They come to understand other perspectives and cultures.



MATHEMATICAL PRACTICES

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning.



CHERRY PICKING

Shifts in ELA/Literacy

Shift 1	Balancing Informational & Literary Text	Students read a true balance of informational and literary texts.
Shift 2	Knowledge in the Disciplines	Students build knowledge about the world (domains/ content areas) through TEXT rather than the teacher or activities
Shift 3	Staircase of Complexity	Students read the central, grade appropriate text around which instruction is centered. Teachers are patient, create more time and space and support in the curriculum for close reading.
Shift 4	Text-based Answers	Students engage in rich and rigorous evidence based conversations about text.
Shift 5	Writing from Sources	Writing emphasizes use of evidence from sources to inform or make an argument.
Shift 6	Academic Vocabulary	Students constantly build the transferable vocabulary they need to access grade level complex texts. This can be done effectively by spiraling like content in increasingly complex texts.

WHAT IS SHIFTING?

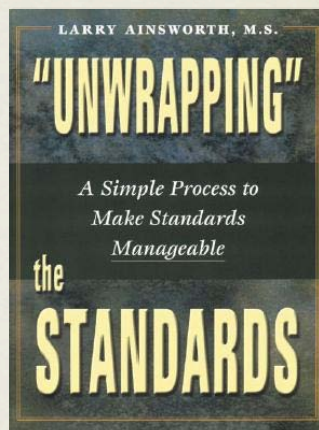
Shifts in Mathematics

Shift 1	Focus	Teachers significantly narrow and deepen the scope of how time and energy is spent in the math classroom. They do so in order to focus deeply on only the concepts that are prioritized in the standards.
Shift 2	Coherence	Principals and teachers carefully connect the learning within and across grades so that students can build new understanding onto foundations built in previous years.
Shift 3	Fluency	Students are expected to have speed and accuracy with simple calculations; teachers structure class time and/or homework time for students to memorize, through repetition, core functions.
Shift 4	Deep Understanding	Students deeply understand and can operate easily within a math concept before moving on. They learn more than the trick to get the answer right. They learn the math.
Shift 5	Application	Students are expected to use math and choose the appropriate concept for application even when they are not prompted to do so.
Shift 6	Dual Intensity	Students are practicing and understanding. There is more than a balance between these two things in the classroom – both are occurring with intensity.

WHAT IS SHIFTING?

LARRY AINSWORTH

Know what your Standards Documents have in them.



UNWRAPPING TO TRANSLATION

- The purpose of unwrapping is to immediately move to curriculum translation.
- For each of the NOUNS we suggest that teachers in small groups give examples of content topics they would address in their curriculum.
- For each of the VERBS we suggest that teachers in small groups give examples of skills and strategies that they would address in their curriculum.



28

TEXT TYPE & PURPOSE

Grade 8

- Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization, and analysis of relevant content.
- Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
- Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
- Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
- Use precise language and domain-specific vocabulary to inform about or explain the topic.
- Establish and maintain a formal style.
- Provide a concluding statement or section that follows from and supports the information or explanation presented.

29

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30

PERFORM OPERATIONS WITH MULTI-DIGIT WHOLE NUMBERS & WITH DECIMALS TO HUNDREDTHS

Grade 5

- 5. Fluently multiply multi-digit whole numbers using the standard algorithm.
- 6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- 7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

31

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32

able to develop a knowledge of the world. It focuses on exploring the decision to present the collection of the museum's collection. It focuses on exploring the decision to present the collection of the museum's collection. It focuses on exploring the decision to present the collection of the museum's collection.

INFORMATIONAL TEXT

Special implications for ALL subject areas, all grades and all teachers

33

CC INFORMATIONAL TEXT KEY IDEAS AND DETAILS

Grade 4

- Draw on details and examples from a text to support statements about the text.
- Determine the main ideas and supporting details of a text; summarize the text.
- Describe the sequence of events in an historical or scientific account, including what happened and why, based on specific information in the text.

34

CC INFORMATIONAL TEXT KEY IDEAS AND DETAILS

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- Draw on details and examples from a text to **support statements** about the text.
- Determine the **main ideas and supporting details** of a text; summarize the **text**.
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35

INFORMATIONAL TEXT KEY IDEAS AND DETAILS

Grade 8

Big Idea/ Major Concept	Essential Questions	Content	Skills	Assessment
•Essays provide a format for a writer to communicate with readers by developing a topic through relevant details and appropriate support. •Writers use a variety of strategies to enhance their message and engage the reader. •The process of writing stimulates the thinking process.	Why do writers pick a particular format/ structure for writing? What strategies can I use to help me be a more effective writer? Why does the process of writing have a positive effect on both the reader and the writer?	•3-5 paragraph essay format •Thesis statement •Focused introductory paragraph •Relevant details and supporting evidence •Logical organization of ideas (e.g., order by chronology, importance...) •Unity/Cohesion •Transitional words and phrases •Personal Writing Style/Voice •Sentence variety •Supportive and evaluative materials Vocabulary: Organizational structures, Sentence types (e.g., short, simple, compound, complex, compound-complex), Personal style, Controlled organization, Internal Unity, Voice	•Write a 3-5 paragraph using the appropriate format •Develop a clear and precise thesis statement as the main idea for the essay •Design an interesting and focused introductory paragraph. •Support the development of the thesis with relevant details, facts, examples, and other specific information •Select and organizes relevant content in appropriate order •Includes a closing statement that summarizes the information presented •Substitutes general terms with precise language to explain a topic •Use a variety of transitional words and phrases to create cohesion and unity within and between paragraphs •Apply a variety of sentences to create a certain effect in making your writing more interesting (e.g., short, clear sentences to create a sense of speed, longer, more complex sentences to create a sense of leisureliness...) •Employ a variety of sentence structures and types to enhance meaning •Evaluate your writing with the criteria and levels of performance on the writing rubric	5 paragraph essay on focused topic Multiple paragraph essay using two different structures- sequence of ideas and comparison/ contrast Graphic organizer – possible supporting details, information, data, charts, and graphs Essay revision task focusing on improving transitions and precise language. Self-assessment using essay rubric

Unit: Multiple Paragraph Essays

Grade or Subject: 8th Grade

Big Idea	Essential Questions	Content	Skills	Benchmark Assessments
Essays allow a writer to develop a topic through relevant details and support. Writers use a variety of strategies to enhance their message and engage the reader.	What strategies can I use to help me be a more effective writer? How can I effectively support my point of view? Why do writers pick a particular structure for writing?	<ul style="list-style-type: none"> Thesis statement Focused introductory paragraph 3-5 paragraph essay Relevant details and supporting evidence Logical organization of ideas (e.g., order by chronology, importance...) Unity/Cohesion Transitions Supportive and illustrative materials Sentence variety Style <p>Vocabulary: organizational structures, compound-complex, personal style, controlled organization, unity</p>	<ul style="list-style-type: none"> Writes a 3-5 paragraph essay with a clear thesis statement and a focused introductory paragraph. Supports the development of the thesis with relevant details, facts, examples, and other information Substitutes general terms with precise language to explain a topic Uses a variety of transitional words and phrases to create cohesions within and between paragraphs Uses a variety of sentence structures to enhance meaning (e.g., short, simple, compound, complex, compound-complex) Uses a variety of sentences to create a certain effect in make your writing more interesting Includes a closing statement that summarizes the information presented Uses the criteria and levels of performance on the writing rubric to assess your writing 	<p>5 paragraph essay on focused topic</p> <p>Multiple paragraph essay using two different structures- sequence of ideas and comparison/contrast</p> <p>Graphic organizer – possible supporting details and information</p> <p>Essay revision task focusing on improving transitions and precise language.</p> <p>Self-assessment using essay rubric</p>

37

CCLS: MATH, NUMBER & OPERATIONS—FRACTIONS

5.NF Use equivalent fractions as a strategy to add and subtract fractions.

Grade 5

- 1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.
- 2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.

38

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Grade 5

- 1. **Add and subtract fractions** with unlike denominators (including **mixed numbers**) by **replacing** given fractions with **equivalent fractions** in such a way as to **produce** an equivalent sum or difference of fractions with **like denominators**.
- 2. **Solve** word problems involving **addition and subtraction of fractions** referring to the same **whole**, including cases of **unlike denominators**, e.g., by **using** visual fraction models or equations to **represent** the problem. **Use** benchmark fractions and **number sense of fractions** to **estimate mentally** and **assess** the **reasonableness of answers**.

39

Strand: Numbers and Operations- Fractions 5th Grade

Big Idea(s)/ Major Concept(s)	Essential Questions	Core Content	Skills	Evidence
<p>A Quantity can be represented numerically in various ways.</p> <p>There are multiple ways to solve a problem.</p>	<p>1. Why are there so many different ways to represent something? (MP #7)</p> <p>2. How do I determine which problem solving strategy to use when solving a problem?</p>	<p>A. Equivalent fractions (Adding and Subtracting)</p> <ul style="list-style-type: none"> * fractions with unlike denominators (including mixed numbers) * equivalent fractions (like denominators) * adding and subtracting fractions with like denominators * $a/b + c/d = (ad + bc)/bd$ * word problems * visual fraction models or equations as examples * mental estimation * reasoning of answers 	<p>A1. Solve addition and subtraction problems with fractions with unlike denominators</p> <p>A2. Solve addition and subtraction problems using mixed numbers with unlike denominators</p> <p>A3. Replace given fractions with equivalent fraction producing like denominators</p> <p>A4. Solve word problems involving fraction with unlike denominators. Students must use visual fraction models or equation to represent problem</p> <p>A5. Estimate mentally and Assess reasonableness of answers. Students must use benchmark fractions and number sense of fraction to support answer</p>	<p>A-1 Blue Print Design Summative Performance Task</p> <p>EQ #1 representing Math Practice 7</p> <p>DOK 4</p> <p>sketchup.google.com for blueprints. You will have to download the program. Students will need computer time to complete items.</p> <p>A-1-3 Test with some computation 10 questions (Type: Brief Response)</p> <p>Summative: Test: Common DOK 1 and DOK 2</p> <p>A-4 Essay Question-How do I determine which problem solving strategy to use when solving a problem? (Type: Brief Response)</p> <p>Summative: Essay Test: DOK 3</p>

40

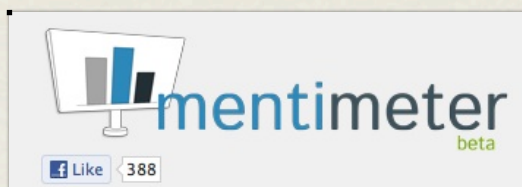


SPECIAL OPPORTUNITY

New Media for Examination and for Production

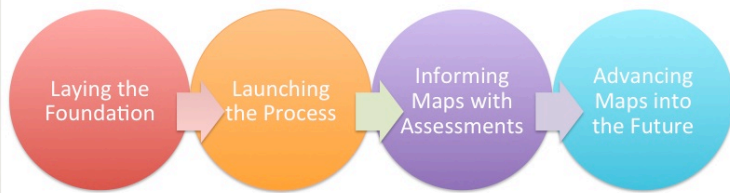
41

USE YOUR PHONE, TABLET OR LAPTOP TO PARTICIPATE!



Go to m.mentimeter.com

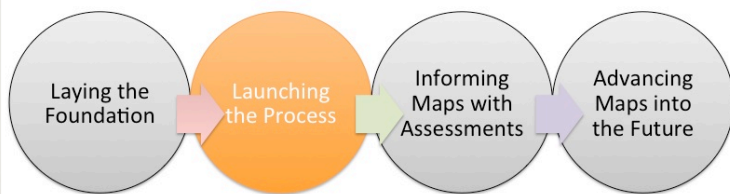
42



FOUR PHASES

Implementation Process

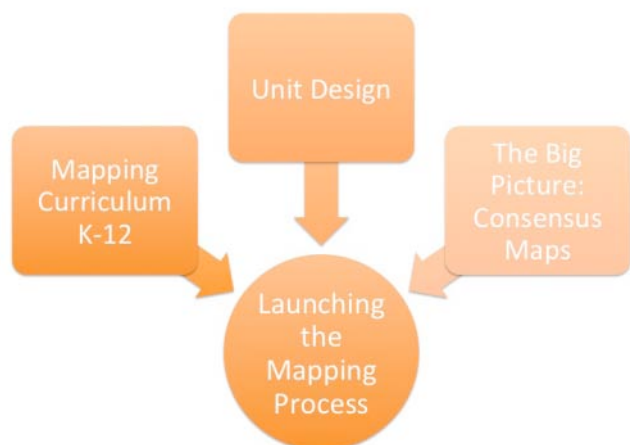
43



PHASE II

Launching the Process

44



45

LAUNCHING THE PROCESS

The leadership team:

- Structures conditions that will make a difference in your planning and initiating.
- Identify and choose a technology format and template
- Identify most valuable forms of assessment.
- Draft an Action Plan (Timeline) for introducing the mapping process to the faculty.



46



NEW LEADERSHIP APPROACHES

Mapping is collaborative leadership in action

WHAT IS CURRICULUM MAPPING?

- Calendar-based curriculum mapping is a procedure for collecting and maintaining a data base of the operational curriculum in a school and/or district.
- It provides the basis for authentic examination of the data base.



48

MAPPING IS A COIN WITH TWO SIDES

- One side is the documentation –the maps themselves
- One side is the review process – examining and revising map cumulatively between teachers



49

TARGET NEEDS: DISCUSSIONS, DEBATES, AND DECISIONS WILL BE BASED ON

- What is in the best interest of our specific clients, the students in our educational setting?
 - Their ages
 - Their stages of development
 - Their learning characteristics
 - Their communities
 - Their aspirations
 - Their needs
 - The need for cumulative learning



50

AP Biology (7/wk)

View Course Description Print

School	Teacher	Email	Course#	Grade Level
Ames District Office	MASTER MAPS, K-12	curriculumoffice@yahoo.com	0HS5Bio	10-12

Show Icon

September 2009

Content	Skills	Assessment	Instructional Methods	Resources, CRISS, etc.
A. Chemistry of life (CLE: A.B.1.1, A.B.1.1-AB.1.5) (ICC: PS.1, PS.3, PS.5, LS.3)	A.1 Relate atoms, molecules, elements and compounds then describe bonding with analogies A.2 Organize organic molecules and monomers into categories A.3 Express the role of Nucleic Acids in inheritance			A. Buffer animation (HumanBiology.com) Campbell <i>Biology</i> 6e CH 2-6, and 41

Close

CONSENSUS MAPS:

Integrating benchmark assessments

Collaborative commitments

Consistency



Essential Questions

Assessment

Other Assessments

Content

Skills / Strategies

Living vs. Non-Living
(Week 4, 4 Weeks)

- What makes something living vs. non-living?
- Can something be considered living but not alive?



Preassessment
(Is it Alive Data Recording Sheet)

Other Visual Assessment
(collage of living and non living things)

Other Visual Assessment
(Benchmark assessment: One of these things is not like the other (McRel Standards activity))

Pre-assessment: Diagnostic: Is it Alive? data recording sheet
Formative performance based assessment: collage of living and non living things

Benchmark assessment: One of these things is not like the other (McRel Standards activity)

Bilevel assessment: ability to predict and justify predictions

All living and nonliving things are made of matter, with the most basic unit of matter being the atom.
Living is used to describe anything that is or has ever been alive; all living things grow, breathe, reproduce, excrete, respond to stimuli, and have similar basic needs (organic)
Non-living is used to describe anything that is not new nor has ever been alive (inorganic) classification for grouping

Study the characteristics of living and nonliving things by viewing and discussing video clip
Predict which items are living and nonliving in TerraAqua Column
Observe living and nonliving in TerraAqua Column
Record observations in Is it Alive? Data Sheet
Document changes predictions
Classify things as

DIARY MAPS: VIABLE

Individual classroom teacher- Responsive to students -Flexibility

52

Unit: Multiple Paragraph Essays

Grade or Subject: 8th Grade

Big Idea/ Major Concept	Essential Questions	Content	Skills	Assessments
<ul style="list-style-type: none"> Essays provide a format for a writer to communicate with readers by developing a topic through relevant details and appropriate support. Writers use a variety of strategies to enhance their message and engage the reader. The process of writing stimulates the thinking process. 	<ul style="list-style-type: none"> Why do writers pick a particular format/structure for writing? What strategies can I use to help me be a more effective writer? Why does the process of writing have a positive effect on both the reader and the writer? 	<ul style="list-style-type: none"> 3-5 paragraph essay format Thesis statement Focused introductory paragraph Relevant details and supporting evidence Logical organization of ideas (e.g., order by chronology, importance...) Unity/Cohesion Transitional words and phrases Personal Writing Style/Voice Sentence variety Supportive and evaluative materials <p>Vocabulary: Organizational structures, Sentence types (e.g., short, simple, compound-complex), Personal style, Controlled organization, Internal Unity, Voice</p>	<ul style="list-style-type: none"> Write a 3-5 paragraph using the appropriate format Develop a clear and precise thesis statement as the main idea for the essay Design an interesting and focused introductory paragraph. Support the development of the thesis with relevant details, facts, examples, and other specific information Select and organizes relevant content in appropriate order Includes a closing statement that summarizes the information presented Substitutes general terms with precise language to explain a topic Use a variety of transitional words and phrases to create cohesion and unity within and between paragraphs Apply a variety of sentences to create a certain effect in making your writing more interesting (e.g., short, clear 	<ul style="list-style-type: none"> 5 paragraph essay on a focused topic Multiple paragraph essay using two different structures- sequence of ideas and comparison/contrast Graphic organizer - possible supporting details, information, data, charts, and graphs Essay revision task focusing on improving transitions and precise language. Self-assessment using essay rubric

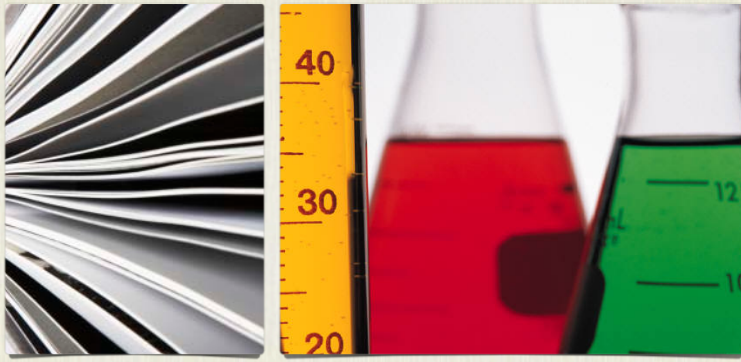
53

ELEMENTS OF CURRICULUM

- Big Ideas
- Essential Questions
- Content
- Skills
- Assessment



54



CONTENT

The subject matter itself: key concepts, facts, events

55

Content Formats

Discipline-Based	Interdisciplinary	Student- Centered
Focus on subjects: math, science, social studies, literature, arts, physical education, etc.	Focus on connections between two or more subject examining common organizing center	Focus on student-developed interests
Should be active: students as “scientists”, as “artists”	Rigorous; avoiding potpourri	Emerges directly from learner

56

SKILLS ARE DISPLAYED ON A MAP AS:

- Precise skills that can be:
 - Assessed/measured
 - Observed
 - Described in specific terms
- Skills are action verbs...
- Skills scaffold over time
- Unlike general processes



57

PRECISION EXPECTATION IS CRUCIAL TO SKILL DEVELOPMENT.

- THE COACH DOESN'T SAY:
 - “We’re working on critical playing skills today.”
- THE COACH DOES SAY:
 - “We’re working on driving into the basket.”



58

ON MAPS, ASSESSMENTS ARE THE MAJOR PRODUCTS AND PERFORMANCES:

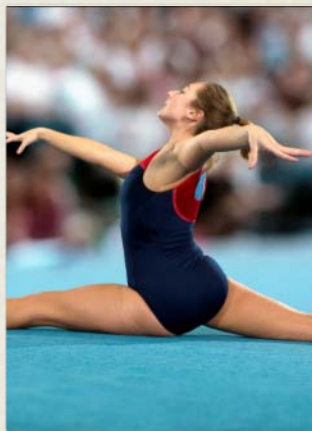
- Assessment is the demonstration of learning
- Assessment is the observable evidence of the CC STANDARD
- They must be listed as defined nouns:
 - Tangible Products or
 - Observable Performances



59

STUDENTS DEMONSTRATE STANDARDS

DIFFERENT TYPES of
performance
provide different types of evidence



60

European Exploration Final Exam

Multiple Choice Section:

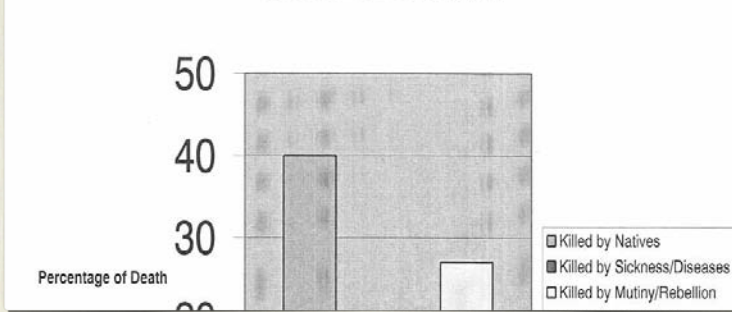
1. This is the great Spanish conquistador who, with a couple hundred Spaniards conquered the Aztec Empire in Mexico:
a. Hernan Cortes b. Hernando de Soto c. Francisco Pizarro d. Robert La Salle
2. This spice comes from the bark of a tree, either in sticks or powder, and is rusty-brown in color, found in South Asia and the southeast Asian islands, and is used for a variety of medicinal purposes:
a. pepper b. cloves c. ginger d. cinnamon
3. During the Renaissance period the Europeans began to build bigger and better ships that could

SELECTED RESPONSE

Multiple Choice- 50 QMC Quiz

61

Failures of Exploration



CONSTRUCTED- RESPONSE QUESTIONING

10- Q Short Answer Test

62

COLLECTION OF ASSESSMENTS:

- Portfolios
- Anthologies
- Recordings of observable performances



63



PERFORMANCE BASED ASSESSMENT

Student developed world wide news service

64



FORMATIVE AND SUMMATIVE ASSESSMENTS REVEAL:

- Proficiency of targeted skill development
- Knowledge and insight into content



66

CURRENT TRENDS: MERGING ASSESSMENT DATA INTO MAPS

- New versions in mapping software are linking to assessment data
- Links to assessment data
- Tabs to differentiated curriculum



67

- THE ASSESSMENT:

- 1 ☐ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS.**
- 2 ☐ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade level language in student prompts.**
- 3 ☐ Includes aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance. **

A unit or longer lesson should:

- ☐ Use varied modes of curriculum embedded assessments that may include pre-, formative, summative and self-assessment measures.

68

LET'S REMEMBER

- **Content** - is the subject matter; key concepts; facts; topics; important information
- **Skills** - are the targeted proficiencies; technical actions and strategies
- **Assessment** - is the demonstration of learning; the products and performances used as evidence of skill development and content understanding



69

ESSENTIAL QUESTIONS

Essential questions provide focus and direction to engage learners in fulfilling the mission.



70

ESSENTIAL QUESTIONS ENCOURAGE:

- New thinking
- Genuine inquiry
- Fresh insights
- Stimulating ideas
- Motivated learners
- Active debate
- Intellectual engagement

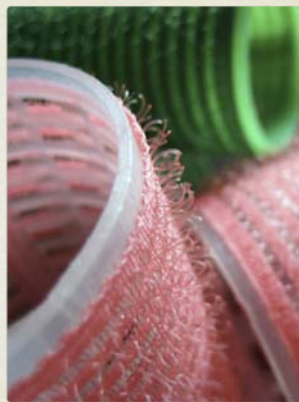


71

ESSENTIAL QUESTIONS

A Form of Mental Velcro

- A literacy tool
- An instructional focus
- An aid for knowledge retention



72

HOW CAN WE ORGANIZE AND FRAME ESSENTIAL KNOWLEDGE?

Big Ideas

- Supported by specific and salient facts, information, findings, observations
- IMPORTANT to note that these very facts, information, findings, observations will change with time
- KNOWLEDGE grows

ESSENTIAL QUESTIONS SHOULD ALIGN WITH KEY CURRICULUM ELEMENTS



- Content
- Assessment
- Skills

74

Framing connections between content, skill, and assessment choices

Potpourri Problem

Long Term Recall

Lack of

Clarifying Purpose

Communication between Student & Teacher

Communication between Teachers

WHY DO WE
NEED
ESSENTIAL
QUESTIONS?

75



WHAT IS A BIG IDEA?

Why is it so critical
to learning &
mapping?

76



A “big idea” is a concept stated as a relational statement that provides the focus and basis for acquiring knowledge.

Concept based learning sustains long term recall of facts vs. isolated fact base learning.

A concept is synonymous with the enduring understanding or big idea from UbD.

77

EXAMPLES OF CONCEPTS



A history unit on Ancient Egypt might focus on the concept:

The geographical location of a culture largely determines its social, political and economic possibilities.



A science unit on the Rainforest might focus on the concept:

In the natural world there are systems comprised of interdependent component parts.

78

REFINING THE CONTENT IDEA

- Revisiting the content section .
- Revisiting it whether it is based on a topic, theme, issue, problem, or work.
- **REFINING** and **FOCUSING** the content using a set of essential questions.



79

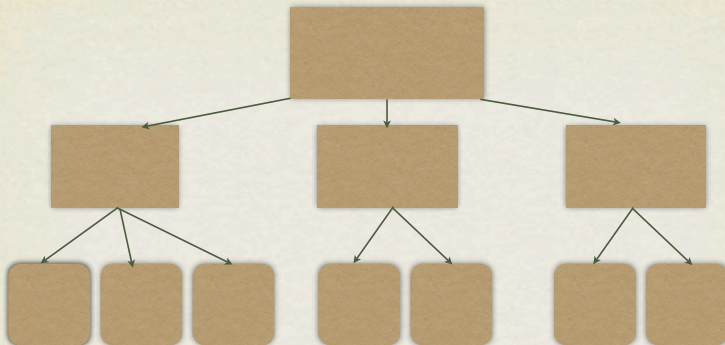
DESIGNING ESSENTIAL QUESTIONS

- Structure the unit around 2 to 5 essential questions
- Use questions as the scope and sequence of unit
- Embrace the appropriate standards



80

ESSENTIAL QUESTIONS AS AN ORGANIZER



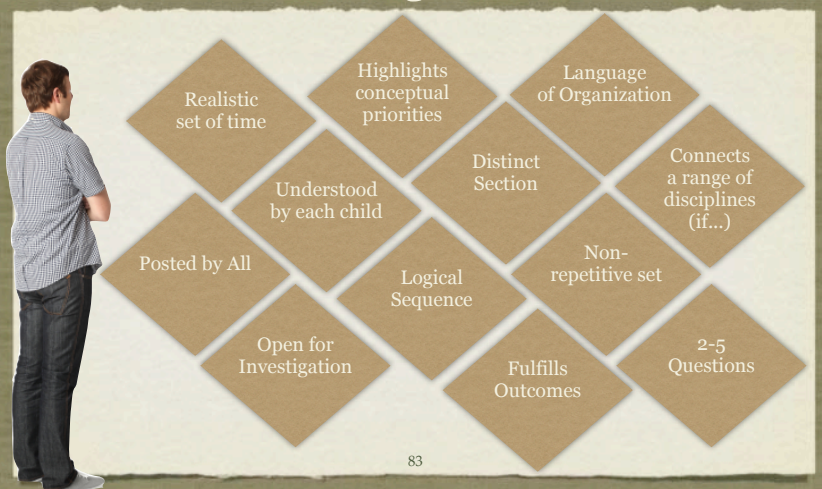
81



ESSENTIAL QUESTIONS ARE CURRICULUM CHAPTERS

82

CRITERIA FOR ESSENTIAL QUESTIONS:



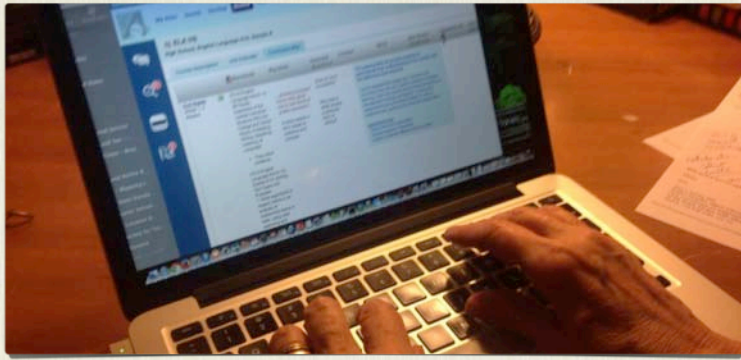
83



What are quality demonstrations of student learning? What do exemplary maps look like?

DEFINE QUALITY

84



UNIT DRAFT

Each Teacher Creates a Quality Map

85

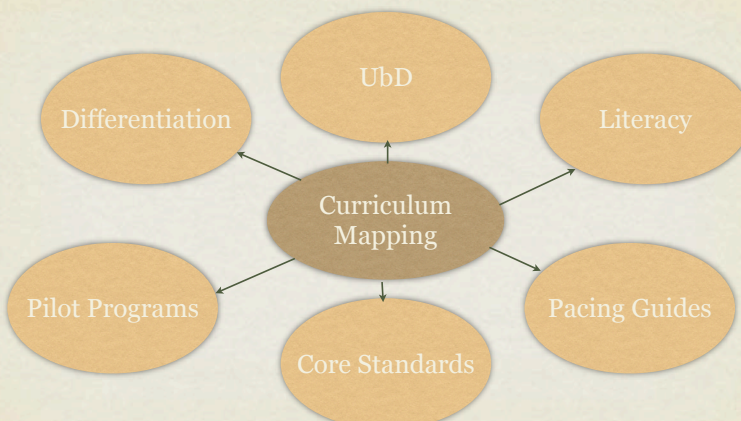


USE MAPPING RUBRICS

Three sets of feedback

86

MAPPING AS A HUB



87

Visual Tools: David Hyerle



CONNECTING INITIATIVES

Team Exercise

88

POTENTIAL TASKS TO ADDRESS SCHOOL/DISTRICT/ COMPLEX PROBLEMS:

- Gain information
- Avoid repetition
- Identify gaps
- Locate potential areas for integration
- Match with learner standards
- Examine for timeliness
- Edit for coherence



89

TO GAIN TASK INFORMATION ON MAPS

- Highlight something new you have learned about the operational curriculum.
- When sharing with colleagues, this process expands a teacher's understanding of the students' experience.



90



EDIT FOR REPETITION

Recognize the difference between meaningless redundancy and powerful spiraling.



EDIT FOR GAPS

*Examine maps for gaps in:
Content, Skills, Assessments*

EMBED & VALIDATE COMMON CORE STANDARDS

- Search the maps for places where students are completing Performance Tasks related to Skills and Content that match the CCSS



EDIT FOR TIMELINESS

- Be vigilant about technology in all aspects of learning.
- Review the maps for timely issues, breakthroughs, methods, materials, and new types of assessments.



94

INTEGRATE CURRICULUM

- Find natural points of integration between subjects for either content connections, cross disciplinary skills, or shared assessment designs.



95

EDIT FOR COHERENCE

- Scrutinize the maps for a solid match between the choice of Content, the featured Skills & Processes, and Assessments.



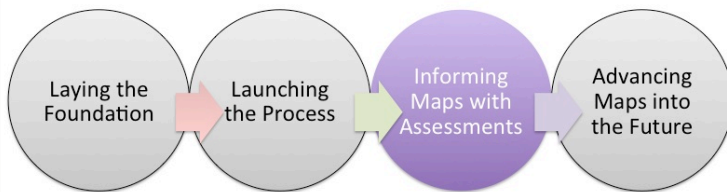
96

GREEN FLAG

Culture of Collaborative Inquiry
Culture of Strategic Communication



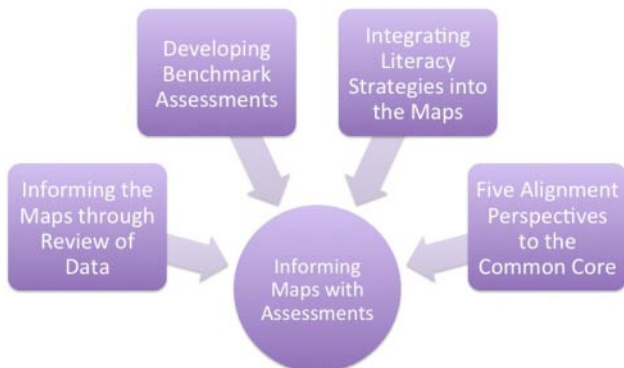
97



PHASE III

Informing Maps with Assessments

98



99

INFORMING MAPS WITH ASSESSMENT

Sustaining and Integrating the System:

- Consensus mapping
- Establishing benchmark assessments to monitor CCSS
- Informing maps with assessment results



100

DIAGNOSIS

finding what our learners need
from the assessment data



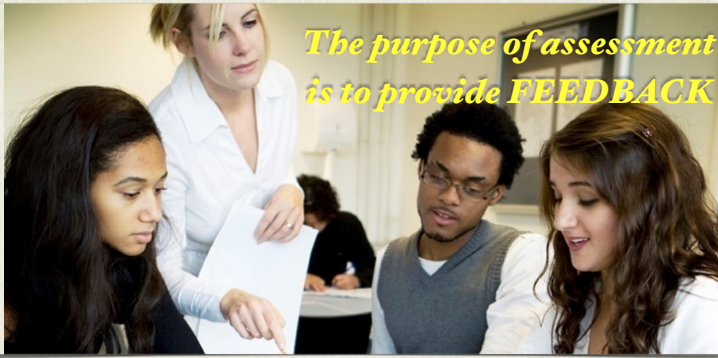
101

PRESCRIPTION

revising our maps
collaboratively to respond to
those targeted needs



102



*The purpose of assessment
is to provide **FEEDBACK***

ONLY THE STUDENT CAN
IMPROVE HIS OR HER
PERFORMANCE



"TEAM LEARNING IS VITAL BECAUSE TEAMS, NOT
INDIVIDUALS, ARE THE FUNDAMENTAL LEARNING
UNIT IN MODERN ORGANIZATIONS"

Peter Senge: The Fifth Discipline

104

VERTICAL COLLABORATION

- At the heart of mapping and working effectively with the standards will be vertical collaboration.
- Jigsaw your faculty members for vertical comparisons of the unwrapping process and discuss:
 - What were the common nouns and verbs?
 - How did they scaffold in complexity?



105

WHAT IS COLLABORATIVE INQUIRY?

Collaborative inquiry is a sustained process of investigation and action that empowers teachers to improve student learning, close the achievement gap and develop school wide leadership.



106

THE COLLABORATIVE INQUIRY PROCESS IS:

Data Driven
by
demographics,
assessment,
previous maps



Lead
by Strategic
Selection of
Teachers



Structured
to Promote
Distributed
Leadership



Focused
on Student
Learning
through a
Range of
Assessments



Designed
to engage
teams in
creating
researched
based learning



107

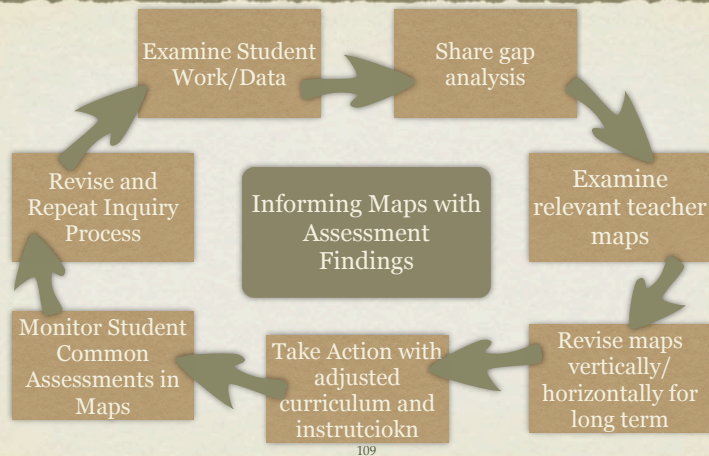
COLLABORATIVE INQUIRY AND MAPPING



- The collaborative inquiry process supports each phase of the mapping process.
- Key element in sustaining the mapping process on both a school and district level.
- Focuses teachers on aligning assessment, curriculum, instruction, and professional development to generate school-wide improvement.

108

COLLABORATIVE INQUIRY WITH MAPS

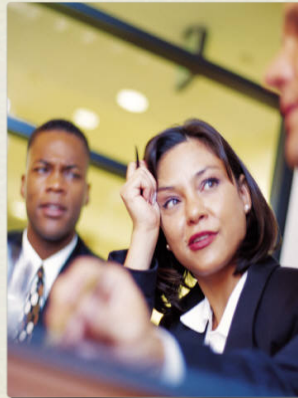


* Source: NYC DOE

1. ESTABLISH PURPOSE FOR REVIEW OF MAPS

Horizontal & Vertical

- To identify the areas or priorities in need of monitoring or changing
- To examine maps for gaps, absences, and redundancies
- To raise central or extended questions and issues concerning on-going mapping discoveries



110

2. INDIVIDUAL TARGETED READ THROUGH

- Teacher reads the designated grade-level, discipline, or school-wide maps as an editor and carried out the prescribed “tasks.”
- Places where new information is gained are noted/recorded. Places requiring potential revision are also noted/recorded.



111

2) SET UP STRATEGIC PROFESSIONAL REVIEW

- Identifying the best grouping patterns for review.
- Using productive communication for feedback and decision making.
- EMPLOY Collaborative Inquiry Protocols



112



STRATEGIC

Grouping for Professional Reviews

113

STRATEGIC GROUPING FOR PROFESSIONAL REVIEWS

- **Vertical – K-12** ; extended departmental meetings
- **Targeted Vertical**- examples: K-1; 3-6 ; 7-11; 10-12
- **Across grade level**- all third grade; all teachers of freshmen
- **Targeted cross grade level**- interdisciplinary 7th grade team
- **Extended team**- special area teachers, special ed staff, ESL
- **Feeder pattern**- in larger districts only those sharing same students; within school following student groups
- **Expanded local team**- virtual groupings (online); parents; community; internships
- **Global team**- Feedback and collaboration with meaningful worldwide educators and students.

114



REVIEWS CAN BE VIRTUAL

115

3) COLLECT DATA ON AREAS OF FOCUS

1. Possible Gaps?	2. Possible Repetition?
3. Progression of Skills? (DOK: Level of Understanding)	4. Standards alignment?

116

4) DETERMINE AREAS FOR IMMEDIATE REVISION

- The faculty identifies those curricula decisions/areas that can be handled by the site with relative ease.
- The specific faculty members involved in those revisions determine a timetable for action.



117

5) DETERMINE AREAS THAT REQUIRE LONG-TERM PLANNING

- Faculty members identify those areas that have implications beyond the site and into/with other sites.
- Faculty members identify those areas where more research is needed
- TASK force for R and D



118

6) TAKE ACTION TO SUPPORT STUDENT LEARNING

- Revisions in curriculum plans
- Revisions in instructional approach
- Monitoring of student formative assessments
- Prepare for next cycle review



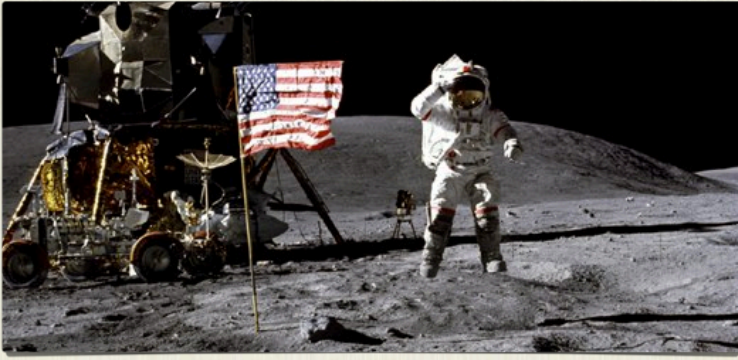
119

7) THE CYCLE CONTINUES

- Site-based level leadership council establishes next review
- Any long term study from task force groups reports on their timetables to faculty.
- The site-based council continues with ongoing review of progress on CCSS vertically



120



REACH NEW GROUND AS A TEAM

*Guiding staff to benchmark assessments on our
consensus maps*

SCHOOLS AND DISTRICTS

are developing Consensus
Maps to replace guidelines



122



WRESTLING WITH CONSENSUS

"acknowledging of truths" (Latin Roots)

123

ALL MEAN THE SAME...

You need to determine what terms you will use at your school

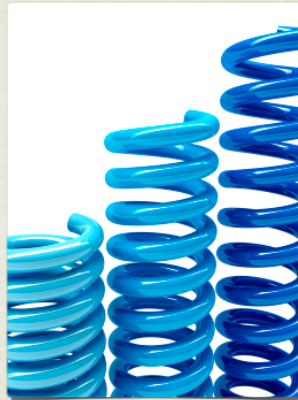
- Master Map
- Consensus Map
- Essential Map
- Core Map
- Collaborative



124

POLICY CONCERNING:

- Where is consistency critical for our students' learning?
- Where is flexibility equally as important?



125

TWO BASIC APPROACHES

1.

Using individual diary maps

2.

Revising and reacting to an already existing set of guidelines



126

1. USING INDIVIDUAL DIARY MAPS

have grade-level or course teachers develop a subject or course's Essential Map by identifying:

- The core curriculum concepts
- The critical focal skills
- Benchmark assessments
- Common essential questions
- Essential learnings/Power standards

127

2. REVISING & REACTING TO EXISTING SET OF GUIDELINES

- Reviewing an agreed-upon school's guideline and modifying
- Monitoring the individual classroom to see how the drafted Essential Map plays out
- Re-visiting the first-draft Essential Map and converting it to an active Essential Map

128

What policies are governing your school practice in assessment?

Text

FORMAL BENCHMARKS

Smarter Balanced - <http://www.smarterbalanced.org/smarter-balanced-assessments/>

PARCC - <http://www.parcconline.org/parcc-assessment-design>

129

BENCHMARK ASSESSMENTS

- Benchmarks can be designed on multiple levels: state tests, district, classroom tasks.
- A school establishes a common set of skills needing development.
- An internally generated benchmark assessment task is developed by teachers with the same protocols; the same timetable.



130

MAPPING CORNERSTONE & BENCHMARK ASSESSMENT

- The task should merge with the on-going curriculum naturally.
- Student products can then be evaluated both vertically and horizontally.
- Revisions in the curriculum map should reflect a few targeted skills needing help.
- Revisions should be applied thoughtfully to developmental characteristics of the learner.



131

No common end of unit assessments
Teach units when choose

Common end of unit assessments
Teach units within quarters
Free choice of instructional materials

Common end of unit assessments
Teach units in required order & month
Limited choice of instructional materials

Common end of unit and during unit assessments
Teach units in required order and month
Common lesson plans & instructional materials

FLEXIBLE

CONSISTENT

Hamburg, NY

Kau Keau Pahoa, HI

Glendale Unified HS District, AZ

132

PROGRAM AREA

Content Standards

Overarching
Understanding

Overarching
Essential Question(s)

Cornerstone
Assessments

Course 1

Course 2

Course 3

Course 4

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5

133

SELECTED RESPONSES

Choose from options that have already been determined and are provided for the student.

- Multiple Choice
- True/False
- Matching
- Short Answer Fill in



134

EXTENDED WRITTEN RESPONSE

Student is asked to respond in written form with complete sentences that could range from a small number of sentences to a complete written work depending upon the task assigned.

- Personal Essay
- Persuasive Essay
- Analytic Essay
- Descriptive Essay
- Simple research paper
- Complex research paper
- Brief Response



135

PERFORMANCE ASSESSMENT PRODUCTS

- Can be observed from three perspectives: observation during work, observation of work in process to final product of work.
- It must include scoring criteria in advance of the observation.
- Assessment of process would be dictated from the standard and the inherent learning process required to meet that standard.



136

TYPES OF PERFORMANCE ASSESSMENTS

- Story Boards
- Story lines
- Graphs
- Charts
- Observational drawing
- Note cards
- Artifact analysis
- Photo essay with text
- Comparative observations
- Blue prints
- Power point presentation
- Thinking Maps & Graphic Organizers



137

PERSONAL & PUBLIC COMMUNICATION

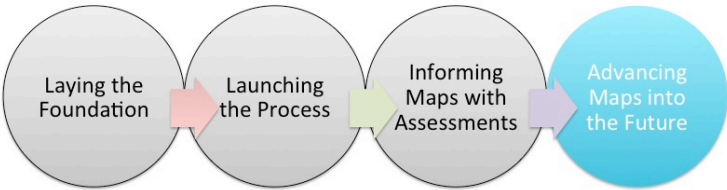
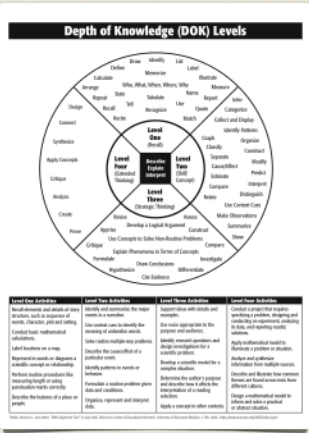
- Conversation
- Journal
- Portfolio
- Video casts
- Podcasts
- Email
- Oral examination
- Documentaries
- Running Records
- Website design
- Interactive Notebook



Highly structured and systematic opportunity for students to convey their learning either from student to student, student to teacher, and/or student to other assessor or through their reflections.

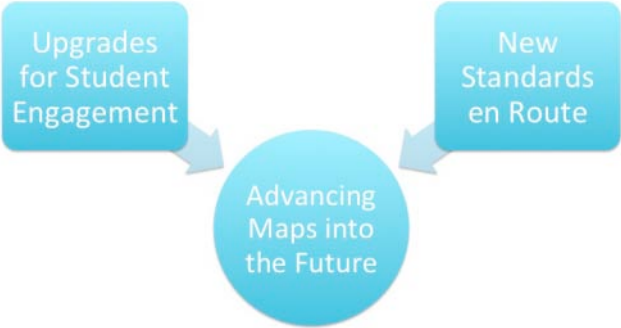
DETERMINE POLICY ON DEPTH OF KNOWLEDGE FOR YOUR BENCHMARK ASSESSMENTS

Inquiry based examination of
student work in reference to
DOK



PHASE IV

Advancing Maps into the Future



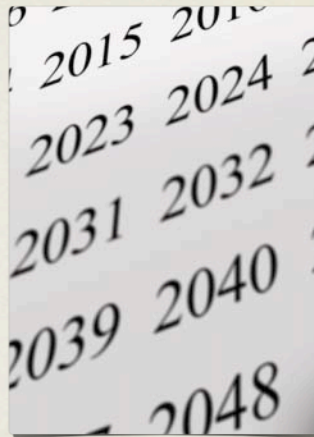
RECAST CONTENT FOR TIMELINESS

- Breakthroughs
- New Standards
- Contemporary issues
- International perspectives
- Modern forms of expression
- ..A deliberate need to replace and to shed dated curriculum.

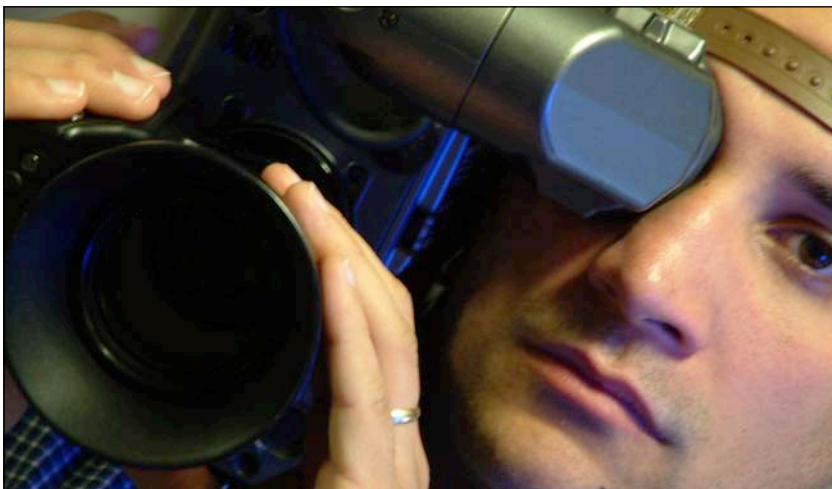


ADVANCING MAPS INTO THE FUTURE

- Preparing for next standards from CCSSO
- Integrating 21st century skills
- Replacing dated content
- Upgrading to contemporary assessment types
- Map professional development
- Rethinking school formats and leadership protocols



143



The new
literacies : DIGITAL
MEDIA
GLOBAL



MAPPING THE GLOBAL
CLASSROOM OF THE FUTURE

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MI 2013 Academy - Mapping to the Core - July 10-11 - Salt Lake City, UT - Register TODAY

all resources

sorted by
most popular first

containing
title or description

to rate and submit resources



National Gallery for kids

<http://www.nga.gov/kids/>

(1 ratings)

interactive programs for making and analyzing art. Very useful as formative work to illustrate certain concepts like: fra juxtaposition. etc.

Posted by oswihs, last updated on July 21, 2012

Categories: Art

DEVELOP a
CLEARINGHOUSE

Apps, Websites, e-Resources

WHAT IS NEEDED?

- SHORT TERM- UPGRADES- “revision and replacement” of dated curriculum and assessment types with more vital contemporary forms.
- LONG TERM- VERSIONING to new versions of the program structures in our school institutions that house curriculum and instruction.

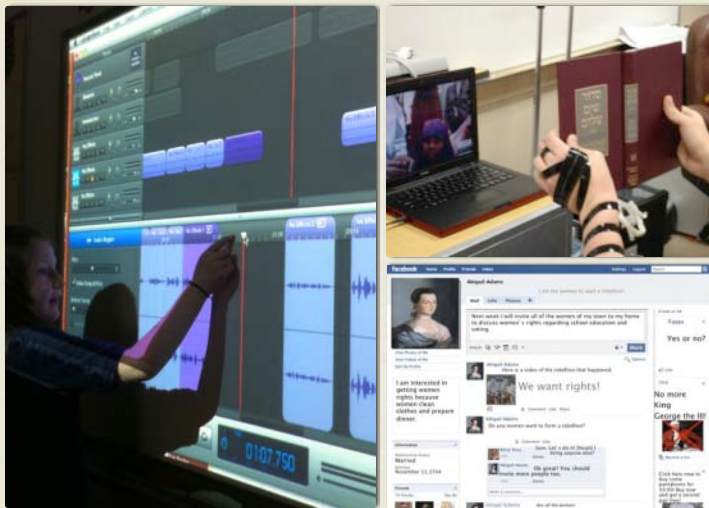


146

UPGRADING MAPS FOR LEARNER ENGAGEMENT

- Screenplays
- Teleplays
- Podcasts
- Broadcasts
- Documentaries
- Email
- The SKYPE grandmothers
- Self publishing
- Facebook pages of historical figures
- text messaging as notetaking
- Video conferences in world language classes
- My space as biography
- Grant proposals
- Web page
- Spreadsheets
- CAD blueprints
- Forecasts
- Media criticism
- Webquests
- Second life technology
- Digital portfolios

147



EdSteps

Username Password

[New User](#)

[Home](#) [About Us](#) [Skills](#) [Teachers](#) [Students](#) [Get Involved](#) [Prizes](#)

A New Path to Student Achievement

Join EdSteps in building a new way to see growth in student performance, using real examples of student work.

EdSteps seeks work samples from people of all ages that demonstrate key skills, beginning with **Writing** samples and **Global Competency** work samples.

Project Overview
EdSteps is currently in Phase One of the project. In this phase, EdSteps invites

New User
[Register with EdSteps](#)

Submit Work
[Submit work with EdSteps](#)

NEXT STANDARDS

and Work from CCSSO

149

EdSteps

Global Competence Matrix

Asia
Partnership for 21st Century Learning

Investigate the World	Recognize Perspectives	Communicate Ideas	Take Action
Students investigate the world beyond their immediate environment.	Students recognize their own and others' perspective.	Students communicate their ideas effectively with diverse audiences.	Students translate their ideas and findings into appropriate actions to improve conditions.
Students can: <ul style="list-style-type: none"> Generate and explain the significance of locally, regionally or globally focused researchable questions. Identify, collect and analyze the knowledge and evidence required to answer questions using a variety of international sources, media and languages. Weigh, integrate and synthesize evidence collected to construct coherent responses that is appropriate to the context of issues or problems. 	Students can: <ul style="list-style-type: none"> Recognize and articulate one's own perspective on situations, events, issues or phenomena and identify the influences on that perspective. Articulate and explain perspectives of other people, groups or schools of thought and identify the influences on those perspectives. Explain how the interaction of ideas across cultures influences the development of knowledge and phenomena. Articulate how the consequences of 	Students can: <ul style="list-style-type: none"> Recognize that diverse audiences may perceive different meanings from the same information. Use appropriate language, behavior and strategies to effectively communicate, both verbally and non-verbally, with diverse audiences. Explain how effective communication impacts understanding and collaboration in an interdependent world. Select and effectively use appropriate technology and media 	Students can: <ul style="list-style-type: none"> Recognize one's capacity to advocate for and contribute to improvement locally, regionally, or globally. Identify opportunities for personal and collaborative action to address situations, events, issues or phenomena in ways which can make a difference. Assess options for action based on evidence and the potential for impact, taking into account varied perspectives and potential consequences for others.

GLOBAL COMPETENCIES

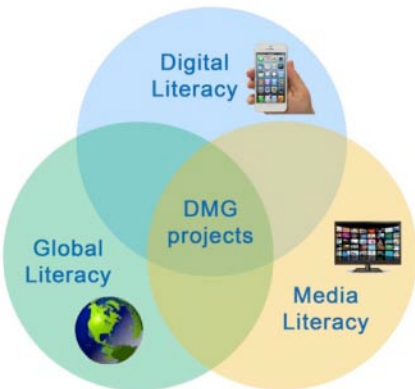
EdSteps & Asia Society

150



NEXT GENERATION SCIENCE STANDARDS

Dynamic cross disciplinary
themes



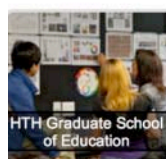
D-M-G PROJECTS

High Tech High

San Diego, California
11 schools

Long term projects
Teachers Publish

[Schools](#) [Graduate School](#) [Projects](#) [Videos](#)



HTH Graduate School
of Education



Projects, Practices and
Publications

1st Grade Little Bird Tale Books

1st grade students used their knowledge of symbiotic relationships in marine environments to build little bird tale books online. While completing the tales, students became illustrators, authors and speakers.

	JELLYFISH	LOBSTERS	SEA STARS
			
	http://www.littlebirdtales.com/tales/view/story_id/221864	http://www.littlebirdtales.com/tales/view/story_id/213758/	http://www.littlebirdtales.com/tales/view/story_id/223148
Individual Tales	Lyla and Jessi http://www.littlebirdtales.com/tales/view/story_id/221919	Smith http://www.littlebirdtales.com/tales/view/story_id/221910	
	Scarlett http://www.littlebirdtales.com/tales/view/story_id/221908	Keegan http://www.littlebirdtales.com/tales/view/story_id/221933	

2nd Grade Podcasts

The 2nd grade classes studied the health of the coral reef during the Study of the Sea. Students cre-

Elementary/Primary Projects

Sigsbee Charter School-
Key West, Florida



COMMONS INVITE MY PAGE MEMBERS MULTI-MEDIA GROUPS RESOURCES C21-MAIN-SITE

curriculum **21** MAPPING THE GLOBAL CLASSROOM OF THE FUTURE LEARN

VISITORS AROUND THE WORLD 37,449 Visitors 19 Mar 2010 - 3 Aug 2011

NEWS CMI 2011

CMI 2011 group pool on Flickr

JOINING GLOBAL
PROFESSIONAL NETWORKS
<http://curriculum21.com>



TOP TEN REASONS
for Curriculum Mapping

TOP TEN REASONS TO CURRICULUM MAP

- #10- Mapping is a systems wide planning approach: each teacher and administrator maps
- #9- Mapping provides immediate and strategic access to all maps in a school and between schools



157



- #8- Mapping is time efficient and eliminates unnecessary meetings by providing a virtual platform for information.
- #7- Collaborative Inquiry is the heart of the mapping process creating genuine PLC's for vertical/cross grade level reviews.

158

- #6- Maps ensure all critical elements are designed to support learning: content, skills, assessments, essential questions, vocabulary
- #5- Common Core Standards are visibly aligned in each element for a consistent and guaranteed curriculum.



159

- #4- Consensus Maps provide the “place” to monitor student performance assessments: the diagnosis
- #3- Consensus Maps are revised according to what assessment data reveals about students: the prescription



160

- #2- Diary maps are tailored to the specific needs of your students to provide a viable, differentiated curriculum.
- #1- Mapping keeps a school modern as they are upgraded to prepare learners for their future.



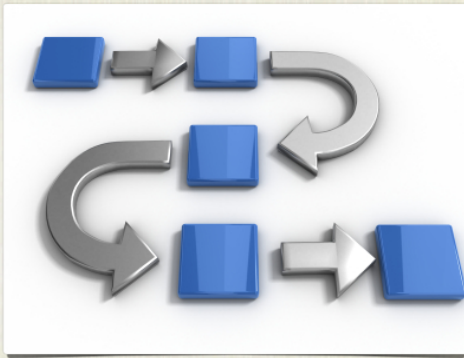
161

POST SCRIPT: *LESSONS FROM AN ARCHITECT*

- Choices for the design
- Limits and possibilities
- Local zoning laws
- Meeting the needs of the users
- Quality of Construction
- Communication is essential
- Alignment !!!



162



5 TYPES OF *Alignment*

163



INTERNAL

The elements in a teacher or district consensus curriculum map align to one another.

164



CUMULATIVE

*The curriculum maps build year to year;
class to class K-12*

165



TO STUDENTS

Curriculum and assessment maps are specifically designed to match the needs of specific learners in specific locations.



GLOBAL

The aims and actions of our school curriculum and programs will help our learners connect to global communities.



EXTERNAL

The curriculum and assessment maps align to external standards and expectations.



<http://www.lumi-book.com>



www.curriculum21.com