Curriculum Mapping and Higher Education

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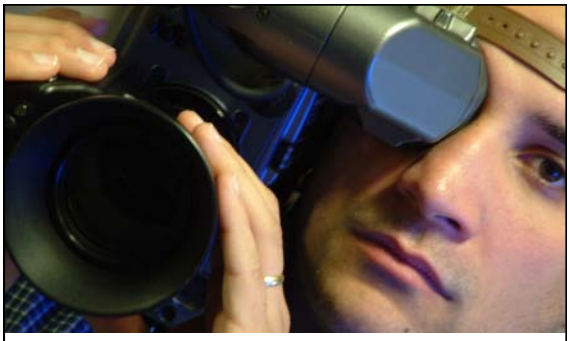
Our Essential Questions

How do we prepare our learners for their future?

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

- Learners create and share knowledge differently from previous generations.

Higher education planning requires thoughtful consideration of both on-site and virtual learning experiences.



The integration of the new literacies:

DIGITAL
MEDIA
GLOBAL

New standards for K-12 globally.

New college and university proficiency standards

edTPA

We have an opportunity

Session Goals

1) Curriculum Mapping Basics

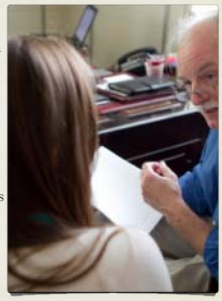
- Four Phase Implementation Model
- Mapping elements
- Brief history

2) Problems Mapping Addresses

- Gap analysis from assessment
- Alignment to mission/standards
- Integration of program design
- Eliminating repetition/ overlap
- Collaborative opportunities

3) Possibilities for employing curriculum mapping for Higher Education

- Possibilities /problems to address/edTPA assessments/ new standards and testing
- Possibilities for course coordination and planning / communication between departments and instructors
- Possible course inclusion of curriculum mapping experience for education majors



Four Phases

Implementation Process

Where is your faculty?

- PHASE I: Background on standards/ mission statement
- PHASE II: Curriculum Mapping
- PHASE III: Culture of Collaboration and Unpacking Assessment Results
- PHASE IV: Digital-Media-Global integration / Modern content

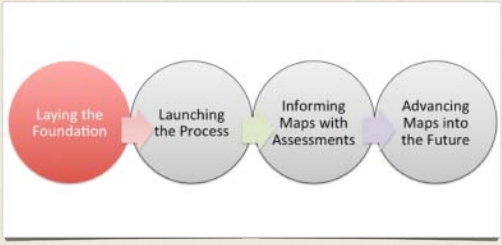
Green Flag

Culture of Collaborative Inquiry

Culture of Strategic Communication

Red Flag

Culture of Compliance



Phase I

Laying the Foundation

Laying the FOUNDATION

Mission drive purpose

Background on mapping

Targeted standards and outcomes

Leadership team structure to sustain the work

Standards- Basics

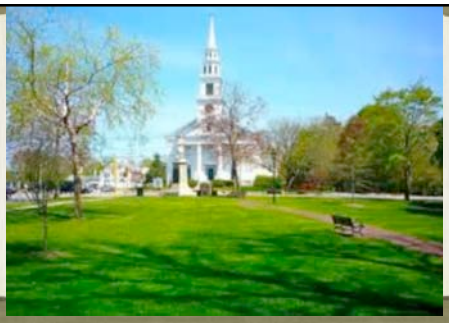
- They do not tell you WHAT to TEACH, WHEN to TEACH, HOW to TEACH
- They are proficiency targets not curriculum.
- Student progress on standards is revealed through a range of assessments.
- Students need to be directly involved in their own mastery and growth.

Importance of mission for curriculum mapping

Mission embedded in maps

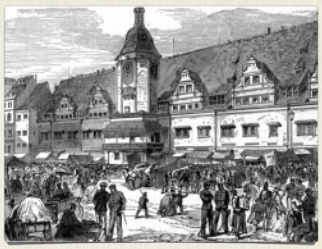
Common Core State StandarDs

http://corestandards.org



Town Common

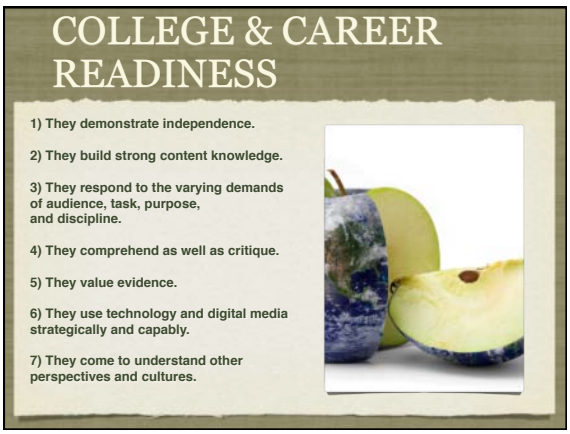
CCSS provide a common meeting place

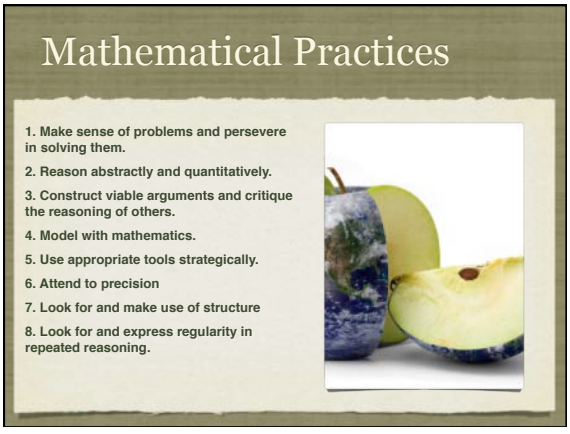


A Marketplace

For sharing and for choice


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


COLLEGE & CAREER READINESS
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.

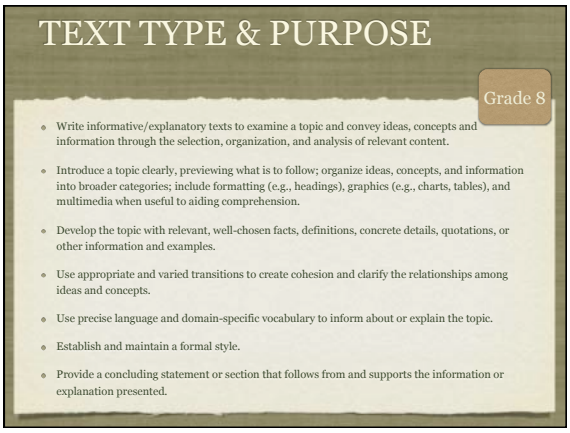
Avoid Cherry Picking standards

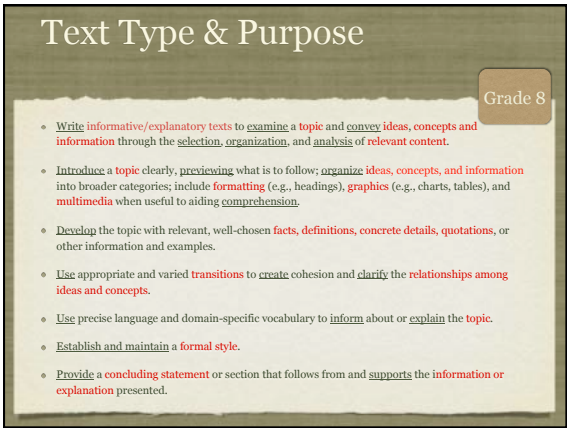
Larry Ainsworth

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.


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.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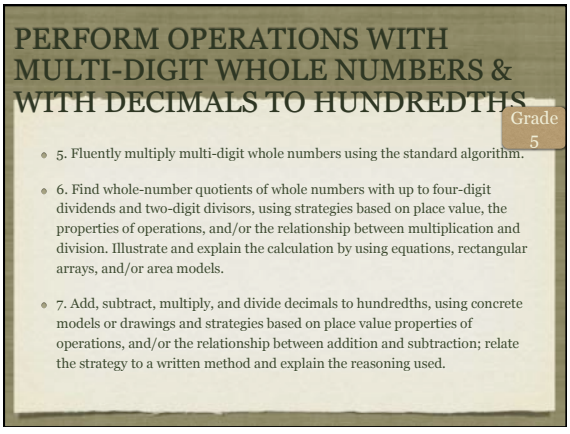
PERFORM OPERATIONS WITH MULTI-DIGIT WHOLE NUMBERS & WITH DECIMALS TO HUNDREDTHS
Grade 5
5. Fluently multiply multi-digit whole numbers using the standard algorithm.
6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place 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.

Perform operations with multi-digit whole numbers & with decimals to hundredths

Grade 5

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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.

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 formatThesis statementFocused introductory paragraph Relevant details and supporting evidenceLogical organization of ideas (e.g., order by chronology, importance...)Unity/ CohesionTransitional words and phrasesPersonal Writing Style/VoiceSentence varietySupportive 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 formatDevelop a clear and precise thesis statement as the main idea for the essayDesign an interesting and focused introductory paragraph.Support the development of the thesis with relevant details, facts, examples, and other specific informationSelect and organizes relevant content in appropriate order Includes a closing statement that summarizes the information presentedSubstitutes general terms with precise language to explain a topicUse a variety of transitional words and phrases to create cohesion and unity within and between paragraphsApply 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 topicMultiple paragraph essay using two different structures- sequence of ideas and comparison/ contrastGraphic organizer – possible supporting details, information, data, charts, and graphsEssay revision task focusing on improving transitions and precise language.Self-assessment using essay rubric

NYSTCE-
Proficiencies can be mapped

NEW YORK STATE
TEACHER CERTIFICATION EXAMINATIONS™

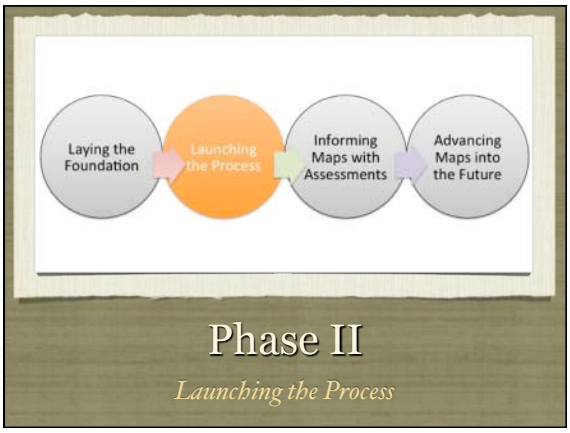
align Curriculum and assessment to ALST (Reading)

Performance Indicators

a. determines what a text says explicitly
b. makes logical inferences based on textual evidence
c. draws conclusions based on textual evidence
d. determines the central ideas or themes of a text
e. analyzes the development of central ideas or themes of a text
f. recognizes accurate summaries of key supporting details and ideas in a text
g. analyzes how and why individuals, events, and ideas develop and interact over the course of a text
h. interprets words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings
i. analyzes how specific word choices shape meaning and tone in a text
j. analyzes how specific sentences, paragraphs, and larger portions of a text relate to each other and the whole
k. determines an author's attitude, opinion, or point of view
l. assesses how point of view and purpose shape the content and style of a text

Four Phases

Implementation Process



Launching the process

The leadership team:

- Clarifies purpose of mapping; different types of maps; key mapping elements
- Identify and choose a technology format and a common template
- Identify most valuable forms of assessment.
- Draft an Action Plan (Timeline) for introducing the mapping process to the faculty.

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.

Mapping is A Coin with two sides

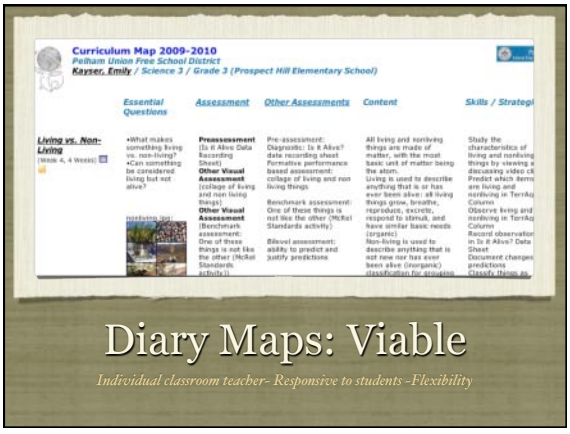
- One side is the documentation –the maps themselves
- One side is the review process – examining and revising map cumulatively between teachers

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

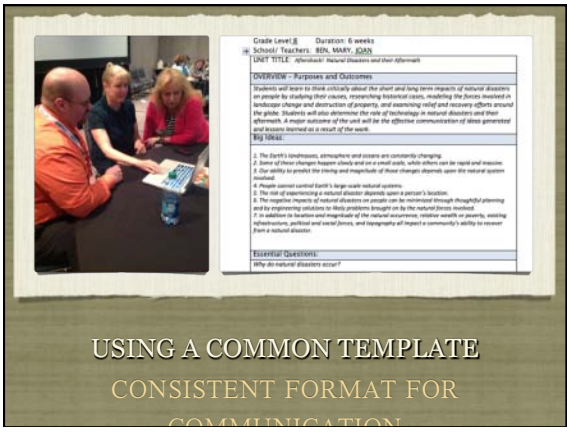
Consensus Maps: Guaranteed

Integrating benchmark assessments
Collaborative commitments
Consistency



Diary Maps: Viable

Individual classroom teacher- Responsive to students -Flexibility

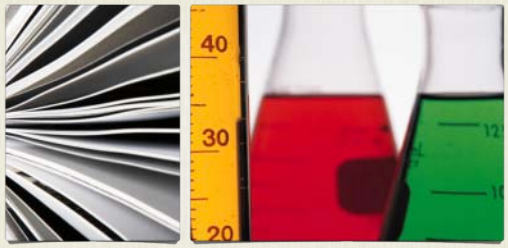


USING A COMMON TEMPLATE

CONSISTENT FORMAT FOR COMMUNICATION

Elements of Curriculum

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



Content

The subject matter itself: key concepts, facts, events

Skills are Displayed on a map as:

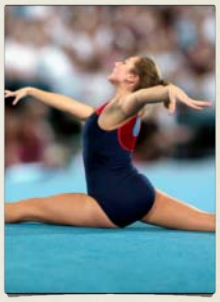
- Precise skills that can be:
  - Assessed/measured
  - Observed
  - Described in specific terms
- Skills are action verbs…
- Skills scaffold over time
- Unlike general processes

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

students demonstrate standards

DIFFERENT TYPES of performance provide different types of evidence



European Exploration Final Exam

Multiple Choice Section:

1. This is the great Spanish conquistador who, with a couple hundred Spaniards conquered th Aztec Empire in Mexico:

a. Hernan Cortes b. Hernando de Soto c. Francisco Pizarro d. Robert La Salle

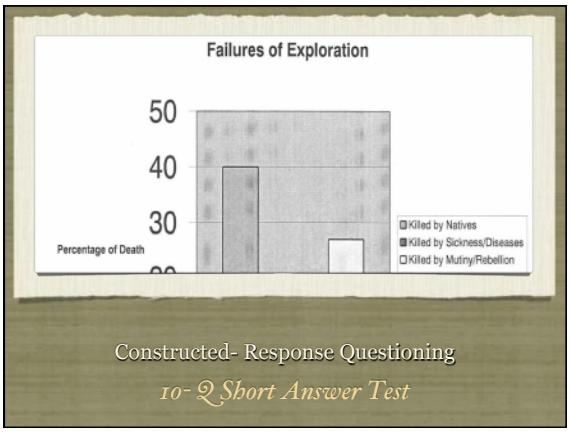
2. This spice comes from the bark of a tree, either in sticks or powder, and is rusty-brown i color, found in South Asia and the southeast Asian islands, and is used for a variety of medicina purposes:

a. pepper b. cloves c. ginger d. cinnamon

3. During the Renaissance period the Europeans began to build bigger and better ships that coul

Selected Response

Multiple Choice- 50 QMC Quiz



Constructed- Response Questioning

10- Q Short Answer Test

Collection of Assessments:

- Portfolios
- Anthologies
- Recordings of observable performances

Formative and Summative ASSESSMENTS reveal:

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

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

- THE ASSESSMENT:

☞❑ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS.**

2 The content prompt/ question is clear and essential.

✓❑ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade level language in student prompts.**

✓❑ 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.

Essential Questions

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

Essential Questions Encourage:

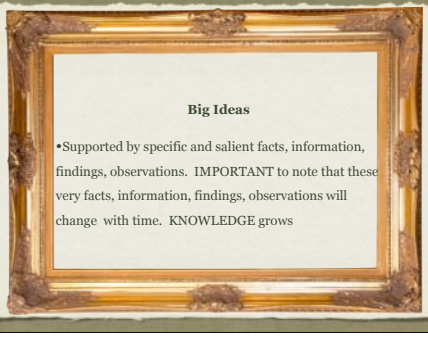
- New thinking
- Genuine inquiry
- Fresh insights
- Stimulating ideas
- Motivated learners
- Active debate
- Intellectual engagement

Essential Questions

- **A Form of**
- **Mental Velcro**

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

How can we organize and frame essential knowledge?



Essential questions should align with Key Curriculum Elements

- Content
- Assessment
- Skills

WHAT IS A BIG IDEA?

Why is it so critical to learning & mapping?

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.

Examples of BIG IDEAS

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.

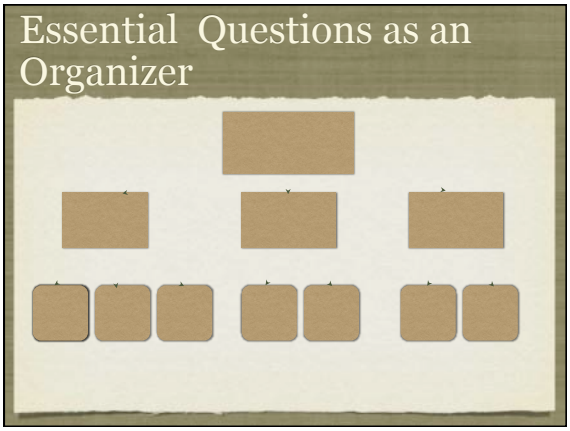
REFINing the content idea

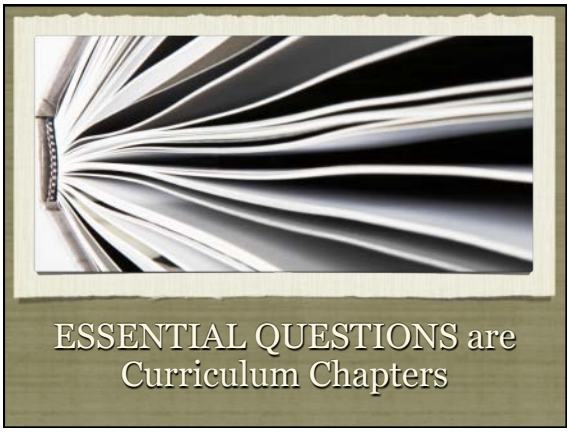
- Revisiting the content section .
- Revisiting it whether it is based on a topic, theme, issue, problem, or work.
- REFINING and FOCUSING the content using a set of essential questions.

designing essential questions

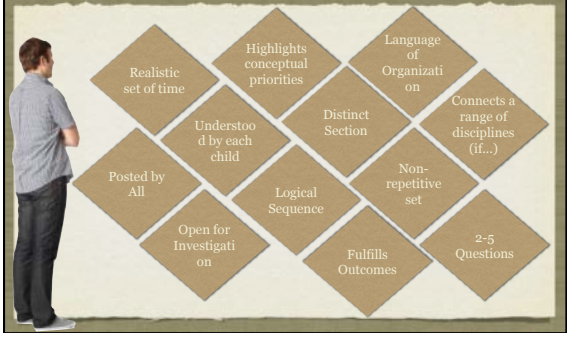
- Structure the unit around 1 to 4 essential questions
- Use questions as the scope and sequence of unit
- Embrace the appropriate standards

Essential Questions as an Organizer



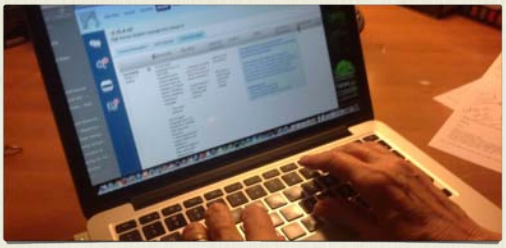


Criteria for Essential Questions:



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

define quality

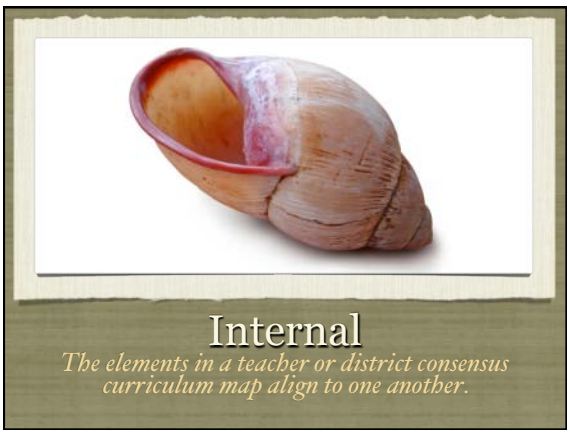


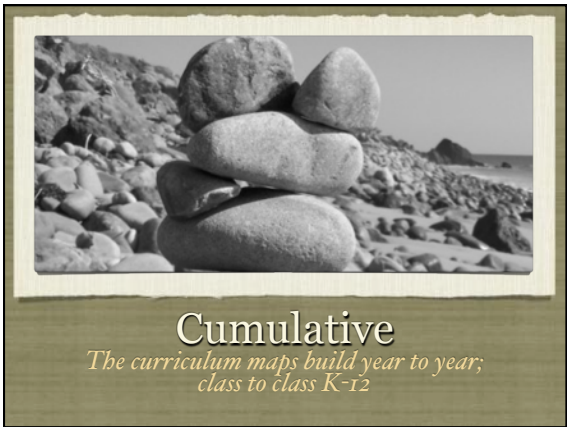
UNIT or Course DRAFT

Use mapping Rubrics

Important feedback: from a range of colleagues


5
Review maps for:
Five Types of Alignment


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


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

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.

Green Flag

Culture of Collaborative Inquiry

Culture of Strategic Communication

Phase III

Informing Maps with Assessments

Informing maps with assessment

Sustaining and Integrating the System:

- Establishing benchmark assessments
- Informing maps with assessment results
- Ensuring alignment

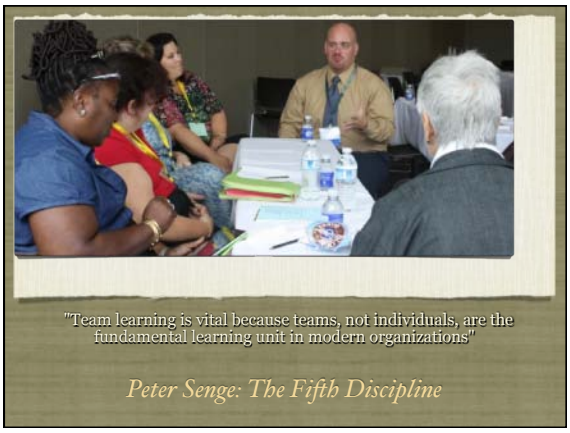
Diagnosis

finding what our learners need from the assessment data

Prescription

revising our maps collaboratively to respond to those targeted needs

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

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.

The Collaborative Inquiry Process Is:

Data Driven by demographics, assessment, previous maps

Lead by Strategic Selection of Teachers

Structured to Promote Distributed Leadership

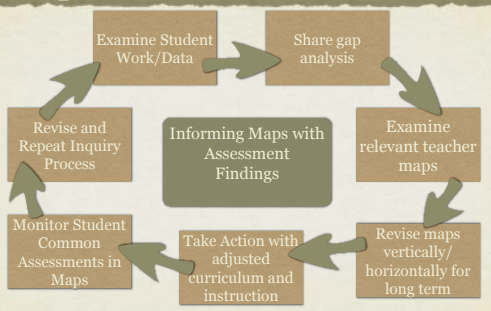
Focused on Student Learning through a Range of Assessments

Designed to engage teams in creating researched based learning

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.

Collaborative InquirY with Maps



* Source: NYC DOE

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.

Strategic grouping in Higher education?

- Within a department
- Across departments
- Individual students planning

- Others?

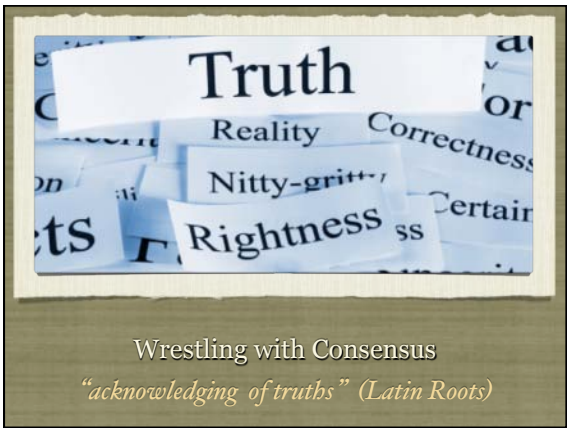
Reach new ground as a team

Guiding staff to benchmark assessments on our consensus maps

Schools and Districts

are developing Consensus Maps to replace guidelines

What are the implications for higher education?



Wrestling with Consensus

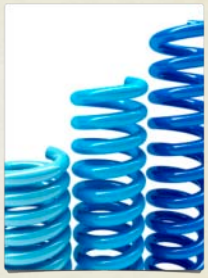
"acknowledging of truths" (Latin Roots)

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

Policy concerning:

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



Two Basic Approaches

1. Using individual diary maps
2. Revising and reacting to an already existing set of guidelines

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 assessmentsCommon essential questionsEssential learnings/Power standards

What policies are governing your institution's assessment practice?

Formal Benchmarks

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.

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.

program area

Content Standards | Overarching Understanding | Overarching Essential Question(s)

Cornerstone Assessments

Course 1 | Course 2 | Course 3 | Course 4

Unit 5

Determine Benchmark Assesmment type for vertical review

vertical Collaboration

- At the heart of mapping and working effectively with the standards will be vertical collaboration.
- Higher Education articulation for each student's pathway
  - Thoughtful scaffolding of benchmark tasks
  - Attention to gap analysis

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

extended written Response

- Student is asked to respond in written form that can lead to media products or standard written assessment
  - Thesis development
  - Book critique
  - Documentary Script
  - Persuasive Essay
  - Analytic Essay
  - Descriptive Essay
  - Simple research paper
  - Complex research paper
  - Narrative Script

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.

Media assessments

- Skype/Google Hangout
- Analysis of recordings
- Video documentaries
- Podcast documentaries
- Video/Podcast narratives
- Website creation
- Media Creations/Digital Apps

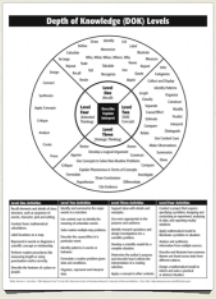
personal & public communication

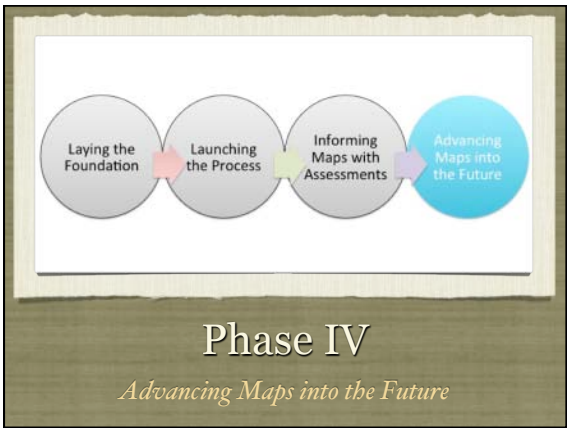
- Conversation
- Journal
- Portfolio
- Video casts
- Podcasts
- Email
- Oral examination
- Blogs
- Running Records
- Interactive Notebook

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



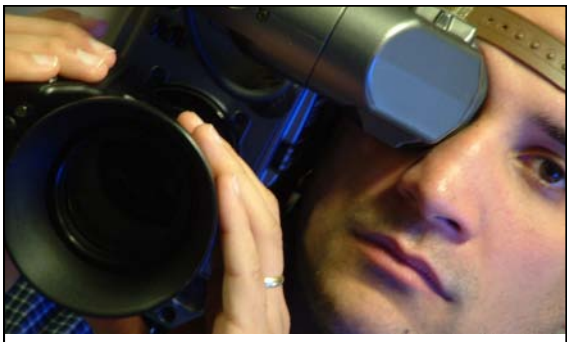


recast content for timeliness

- 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



The new literacies : DIGITAL MEDIA GLOBAL

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.

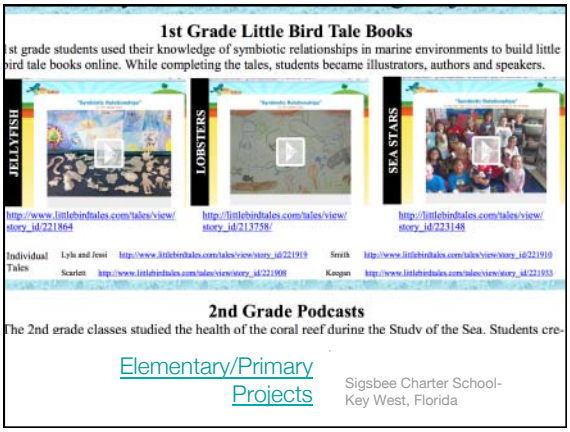
NEXT GENERATION SCIENCE STANDARDS

Dynamic cross disciplinary themes

D-M-G PROJECTS

High Tech High

San Diego, California
11 schools
Long term projects
Teachers Publish



Elementary/Primary Projects

Sigsbee Charter School-
Key West, Florida

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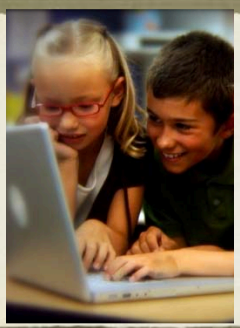
for Curriculum Mapping

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



- #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.

- #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.

- #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

- #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.

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 !!!

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