Using the Standards to Foster a Culture of Deep Learning

Kate Lechtenberg and Jeanie Phillips
May 8, 2018
Welcome and Introductions

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Who is in the room?

Respond to the poll to tell us a little more about you!
Purpose: explore the possibilities for engaging learners of all ages in authentic, meaningful work that sparks curiosity and builds real world skills.
Objectives:

● To familiarize yourself with opportunities within the Standards to foster deep learning.

● To explore instructional scenarios that engage students in deep learning.

● To identify instructional practices that transform surface learning into deep learning.
Specifically, we hope you leave with:

- A definition of deep learning and its intersection with the Standards.
- Core concepts that deepen learning.
- Examples in action and ideas for implementing the standards to deepen learning for your students.
Deeper Learning Competencies

Freire challenges teachers to reject the “banking” concept of education, in which teachers “fill” students with “true knowledge” (2000, p. 76). Instead he calls teachers to radical, deep learning:

“From the outset, her efforts must coincide with those of the students to engage in critical thinking and the quest for mutual humanization. His efforts must be imbued with a profound trust in people and their creative power. To achieve this, they must be partners of the students in their relations with them” (p. 75).

“The Deep Learning Competencies, better known as the 6 C’s, are the skill sets each and every student needs to achieve and excel in, in order to flourish in today’s complex world.”
Core concepts that deepen learning
Audience

How might an authentic audience motivate your students?
Authentic Audience and the Standards

Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

1. Interacting with content presented by others.
2. Providing constructive feedback.
3. Acting on feedback to improve.
4. Sharing products with an authentic audience.

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:

1. Ethically using and reproducing others’ work.
2. Acknowledging authorship and demonstrating respect for the intellectual property of others.
3. Including elements in personal-knowledge products that allow others to credit content appropriately.

Learners responsibly, ethically, and legally share new information with a global community by:

1. Sharing information resources in accordance with modification, reuse, and remix policies.
2. Disseminating new knowledge through means appropriate for the intended audience.
Hierarchy of Audience

Ron Berger
*Leaders of their Own Learning*

- To be of service in the world
- To present to people capable of critiquing
- To present to a public audience beyond the school
- To present to the school community
- To present to parents
- To present to a teacher to fulfill a requirement

Motivation and engagement

INNOVATION Unit

REAL PROJECTS
rigorous, engaging, authentic learning.

American Association of School Librarians
TRANSFORMING LEARNING

standards.aasl.org
Examples of Authentic Audience

The Local Historical Society

A Panel of Experts

An All School Assembly

A class of students from another country via Skype or Google Hangout

An exhibit in a local coffee shop

For more on exhibitions and how they deepen learning visit:
http://tiie.w3.uvm.edu/blog/deeper-learning-exhibition
Voice & Choice

What opportunities do our students have to express themselves through choice?
From “push” to “pull”

“the need for a new approach to learning that increasingly moves from the familiar ‘push’ or ‘supply’ model toward a ‘demand’ or ‘pull’ approach”

(Lankshear & Knobel, 2011, p. 226)
5. Intellectual freedom is every learner’s right.
Learners have the freedom to speak and hear what others have to say, rather than allowing others to control their access to ideas and information; the school librarian’s responsibility is to develop these dispositions in learners, educators, and all other members of the learning community.
Voice & Choice and the Standards

Learners act on an information need by:
1. Determining the need to gather information.
2. Identifying possible sources of information.
3. Making critical choices about information sources to use.

Learners develop and satisfy personal curiosity by:
1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
2. Reflecting and questioning assumptions and possible misconceptions.

Learners exhibit empathy with and tolerance for diverse ideas by:
1. Engaging in informed conversation and active debate.
2. Contributing to discussions in which multiple viewpoints on a topic are expressed.
Layers of Voice & Choice

- **Choice of...**
  - Topics
  - Resources
  - Formats
  - Group vs. Solo
  - Audience
  - Pacing

- **Voice for...**
  - Emotion
  - Perspective
  - Argument
  - Connections
  - Style
  - Culture
Relevance
Relevance and the Standards

Learners display curiosity and initiative by:
1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.

Learners develop and satisfy personal curiosity by:
1. Reading widely and deeply in multiple formats and write and create for a variety of purposes.
2. Reflecting and questioning assumptions and possible misconceptions.

Learners engage with the learning community by:
1. Expressing curiosity about a topic of personal interest or curricular relevance.
2. Co-constructing innovative means of investigation.
3. Collaboratively identifying innovative solutions to a challenge or problem.
“has meaning and value for the student”

<table>
<thead>
<tr>
<th>Attention</th>
<th>Commitment</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td><strong>High</strong></td>
<td>Strategic Compliance - The student associates the task with a result or product that has meaning and value for the student. The student will persist in the face of difficulty and will learn at high and profound levels.</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>Ritual Compliance - The student is willing to expend whatever effort is needed to avoid negative consequences. The emphasis is on meeting the minimum requirements. The student will learn at low and superficial levels.</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>Retreatism - The student is disengaged from the task and does not attempt to comply with its demands, but does not try to disrupt the work or substitute other activities for it. The student does not participate and learns little or nothing from the task.</td>
</tr>
<tr>
<td>No</td>
<td>Low</td>
<td>Rebellion - The student refuses to do the work, acts in ways to disrupt others, or substitutes tasks. The student becomes committed to doing the work and sometimes negative attitudes towards formal education and intellectual tasks.</td>
</tr>
<tr>
<td>Diverted</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**Attention**: The amount of concentration and involvement a student provides to their work. **Commitment**: The level of dedication and persistence a student shows towards their work.

**Engagement** is calculated as:

\[
\text{Level of Engagement} = \text{Attention} \times \text{Commitment}
\]
Strategies for building relevance:

- Student driven questions: QFT, Write Arounds
- Warm ups connect to prior knowledge
- Build background knowledge with pre-search

Learners display curiosity and initiative by:

1. Formulating questions about a personal interest or a curricular topic.
2. Recalling prior and background knowledge as context for new meaning.
Strategies for building relevance:

- Build on student interests
- Engage students in solving real problems
"Authentic thinking, that is concerned about reality, does not take place in ivory tower isolation, but only in communication" (p. 77).

Real Problems & the Standards

Learners contribute a balanced perspective when participating in a learning community by:
1. Articulating an awareness of the contributions of a range of learners.
2. Adopting a discerning stance toward points of view and opinions expressed in information resources and learning products.
3. Describing their understanding of cultural relevancy and placement within the global learning community.

Learners demonstrate empathy and equity in knowledge building within the global learning community by:
1. Seeking interactions with a range of learners.
2. Demonstrating interest in other perspectives during learning activities.
3. Reflecting on their own place within the global learning community.

Learners construct new knowledge by:
1. Problem solving through cycles of design, implementation, and reflection.
2. Persisting through self-directed pursuits by tinkering and making.
Real problems are...

Complex

Conceptual

Embedded in social practices
Students become problem designers

• Rooted in authentic realities
• Multifaceted
• Functional

→ What real problems have your students designed, spotted, or excavated?
Real problems focus on concepts (not topics)

Concepts are...

• Abstract
• Transferable
• Complex
• Layered
Concept layers

Concept: Alliances
Topic: World War II
Subconcepts: intelligence, interdependence, community, compromise, collaboration
(More) conceptual layers

Concept: Home
Topic: Habitats
Subconcepts: wants, needs, survival, environment, adaptation
(Recap!) Real problems are...

Complex

Conceptual

Embedded in social practices
Real problems require social practices--skills in community context.
Academic skills become social practices.

- Identify the central argument
  → Identify and rebut your business competitor’s argument
- Create a model of a cell
  → Present your discovery to a scientific forum.
- Determine cause and effect of historical events
  → Argue why a leader should win the Nobel Peace Prize.
- Evaluate a website
  → Share a relevant, reliable link on Twitter.
Strategies for designing real problems

Seek complexity

Layer concepts

Embed social practices in context
Metacognition

Helping students reflect and think about their thinking
Metacognition and the Standards

Learners participate in an ongoing inquiry-based process by:
1. Continually seeking knowledge.
2. Engaging in sustained inquiry.
3. Enacting new understanding through real-world connections.
4. Using reflection to guide informed decisions.

Learners demonstrate empathy and equity in knowledge building within the global learning community by:
1. Seeking interactions with a range of learners.
2. Demonstrating interest in other perspectives during learning activities.
3. Reflecting on their own place within the global learning community.

Learners engage with information to extend personal learning by:
1. Personalizing their use of information and information technologies.
2. Reflecting on the process of ethical generation of knowledge.
3. Inspiring others to engage in safe, responsible, ethical, and legal information behaviors.

standards.aasl.org
Ask students to unpack and think about their thinking
Some reflective prompts:

What was satisfying about the process?
What was challenging?
What might you do differently next time?
What advice would you give others?
Technology to support Metacognition:

More resources:
- http://sites.google.com/site/mportfolios/
- REAL ePortfolio Academy for K-12 Teachers: http://electronicportfolios.org/academy/
Synthesis Beyond Words

Sketchnoteing

Mind Mapping
Non-Linguistic Representations

1. Come in many forms
2. Identify critical information
3. Should be explained
4. Take time
5. Can be revised

Synthesis Beyond Words and the Standards
Jeanie’s Non-Linguistic Representation of The Power of the Adolescent Brain

An Explanation of My Image:

My “plan book” is in the center, and on top of that is the teenage brain. This reminds me to keep my new understanding of the adolescent brain in the center of my planning, to harness it’s potential instead of lamenting it’s challenges. The surrounding images give me clues about ways I can do this. Starting in the top center and moving clockwise: I plan to be intentional about offering real world challenges to my students, and taking students out into the real world. I want to work on leveraging students emotions- humor, passion, outrage, etc.- to engage them in learning. I hope to build in more opportunities for students to reflect and think about their thinking. My library maker-space is the perfect place for engaging their whole bodies in learning- either through making or through movement. Peer collaborations and connections are already an important part of my teaching, but I want to be deliberate in using them to foster learning. I plan to use self-assessments that ask students to reflect on their strengths and set goals. I hope to engage students in the arts as a way to expand and demonstrate their learning. And finally, I plan to continue to offer meaningful choices to students about how they access resources, create meaning, and demonstrate their new understandings. This book was full of useful information, ideas, and examples and this way of processing it has certainly made them stick!
Examples in Action

Let’s look at the elements of deep learning at work, and their connection to the Standards.

- Audience
- Voice & Choice
- Relevance
- Real Problems
- Metacognition
IV. CURATE
Make meaning for oneself and others by collecting, organizing, and sharing resources of personal relevance.

Learners act on an information need by:
1. Determining the need to gather information.
2. Identifying possible sources of information.
3. Making critical choices about information sources to use.

Learners gather information appropriate to the task by:
1. Seeking a variety of sources.
2. Collecting information representing diverse perspectives.
3. Systematically questioning and assessing the validity and accuracy of information.
4. Organizing information by priority, topic, or other systematic scheme.

Keyword Search and Source Selection

“Can you help my students get better at searching?”
Imagine Your Perfect Source
via Tasha Bergson-Michelson and Nora Murphy

metacognition
synthesis beyond words

https://aasl.digitellinc.com/aasl/sessions/38/view
Iterative Search Strategy

Mind Map
Iterative Search Strategy

Reflection

Metacognition
Types of Sources

Via Mercer Hall and Patricia Russac

Sketchnoteing

http://theasideblog.blogspot.com/2013/06/4th-grade-sketchnotes-visual-mapping.html
## Engage & Curate: Source Evaluation

### Is This Source Worth Your Time? Prove It!

**Title:**

**Website URL:**

<table>
<thead>
<tr>
<th>Authority</th>
<th>Not Authoritative</th>
</tr>
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<tbody>
<tr>
<td><strong>Who is the author?</strong> If you can't find the name or organization, look at the top or bottom of the page. Check the &quot;About Us&quot; page. Is the author connected to a university, research laboratory, or organization?</td>
<td>Based on the information you found about the author, rate this source: (circle one)</td>
</tr>
<tr>
<td><strong>What makes them an authority?</strong> What makes this author an expert on this topic? What is the author's occupation, years of experience, education, or other facts that make him/her an expert?</td>
<td>Authoritative</td>
</tr>
<tr>
<td><strong>Expertise:</strong></td>
<td></td>
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**Learners act on an information need by:**
1. Determining the need to gather information.
2. Identifying possible sources of information.
3. Making critical choices about information sources to use.

**Learners follow ethical and legal guidelines for gathering and using information by:**
1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

[https://docs.google.com/document/d/1QeUDPc3MPFLm6EOSdADAkXzcSP4Tmti8MO3ibiF0Uc/edit?usp=sharing](https://docs.google.com/document/d/1QeUDPc3MPFLm6EOSdADAkXzcSP4Tmti8MO3ibiF0Uc/edit?usp=sharing)
Source Evaluation & Deeper Learning

Non-Linguistic Representation

Reflection
Fact-finding mission becomes inquiry for civic engagement

Year 1: Fact-finding mission
Year 2: Add choice, voice, & relevance
Year 3: Add audience
Year 4: Add real world problem, relevance, and collaboration
8th grade health task: Research your assigned environmental health issue and find the following information:

- Description/definition of the problem.
- Causes
- Effects (environmental and human health)
- Related policies
- Possible solutions

Write one paragraph to summarize your findings for each bullet point. Cite at least three sources.
8th grade health task: Choose an environmental health issue and take a stand on how people or groups should change their behaviors in order to improve human health.

Write a 1-2 page position paper to describe the problem, causes, effects, related policies and the changes you think people can make. Cite at least three sources.
Yr. 3: **Add Audience**

New format tailored to audience: Create an **advocacy poster** to be displayed in the school or in a location you choose in town. Also prepare a 2-minute speech to your peers at the poster gallery! Tell us the problem, causes, effects, policies, and the **action steps** you’d like your peers to take. Cite at least 3 sources using **oral signal phrases**.

Model poster from UNC/Town of Chapel Hill: http://www.townofchapelhill.org/home/showdocument?id=8534
Yr. 4: **Add real problems**

**New concepts:**
- Civic engagement
- Perspective
- Stakeholder

**New social practices:**
- Sharing resources on Twitter
- Debating with community members on public policy

**New problem:** Each group member will take on perspective of a different community stakeholder during a community debate on your group’s chosen environmental health issue.
<table>
<thead>
<tr>
<th>SHIFTING OUR ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instead of . . .</td>
</tr>
<tr>
<td>How do antibiotics work?</td>
</tr>
<tr>
<td>Give a report on a country. Include population, size, government, education system, famous sites, and holidays.</td>
</tr>
<tr>
<td>Write a biography about a famous person. Include their childhood background, education, life struggles, and what they have done.</td>
</tr>
<tr>
<td>Research weaponry from the Civil War. Include major weapons used, how and when they were invented, how they were used, and what their impact on the war was.</td>
</tr>
<tr>
<td>Research a mental illness. Include information about what it is and how it can be treated.</td>
</tr>
</tbody>
</table>

Beyond bibliographies

+ Audience
Relevance
Metacognition

• Oral citations
• Citation stickers (Big 6)
• Social media sharing
• Hyperlinks
• Footnotes & endnotes (for creative works)
Intellectual Freedom is Central to the National School Library Standards

October 9, 2017

By: Kate Lechtenberg

Intellectual freedom advocates have many reasons to be excited about the National School Library Standards for Learners, School Librarians, and School Libraries that will be released at the AASL National Conference November 9-11. School librarians champion access to information and opportunities for all learners, and it’s never been clearer than in this iteration of our professional standards.

Choice, perspective, agency and free expression are key principles of the National School Library Standards. For an intro to the Shared Foundations in the new standards, check out these infographics that outline how learners Inquire, Include, Collaborate, Curate, Explore and Engage while pursuing their freedom to think, create, share and grow in the library.
Creating a Culture of Giving Credit

How might we engage learners AT ALL AGES in a culture of attribution and gratitude?

VI. ENGAGE
Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world.

Learners follow ethical and legal guidelines for gathering and using information by:
1. Responsibly applying information, technology, and media to learning.
2. Understanding the ethical use of information, technology, and media.
3. Evaluating information for accuracy, validity, social and cultural context, and appropriateness for need.

Learners use valid information and reasoned conclusions to make ethical decisions in the creation of knowledge by:
1. Ethically using and reproducing others’ work.
2. Acknowledging authorship and demonstrating respect for the intellectual property of others.
3. Including elements in personal-knowledge products that allow others to credit content appropriately.

MIND MAP!
My thinking about creating a culture of giving credit

Countless students!
Ye Old History Research Paper
Deepening (and dusting off) the Learning

Relevance
Real Problem
Audience(s)
MAKE IT RELEVANT

Go Local
Find a Real Problem

Increase motivation with historical errors!

Brothers Orison (or Alison) and Wiley Clark

These houses are the work of a group of Scottish masons who immigrated primarily from Aberdeen in the 1830s. In 1832, brothers Alison and Wiley Clark came to Vermont to assist in the construction of a stone factory in Chester. Two years later they built the first snecked-ashlar structure in Chester Depot, a Federal house for Dr. Ptolemy Edson.
Add an Audience (or 3)
Read a book. Make a PPT.

Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

1. Interacting with content presented by others.
2. Providing constructive feedback.
3. Acting on feedback to improve.
4. Sharing products with an authentic audience.

BEYOND POSTERS AND PPT

Techie tools for authentic audiences and learning processes
Techy projects -- Add Audience

Kat Lagerquist @katlager · May 3
#grade5 Ss using googleslides and iMovie to create #booktrailers
@mrshartsclass5 @brisdaleps #Peel21st

Uploading a book trailer to Destiny, the online catalog
3,088 views

Michelle Luhtala
Published on Jan 6, 2011

Using google slides to create a book trailer

Working on her book trailer
Sharing books for social justice

Add Real World Problems
Author interview!

Add Voice & Choice

Sheyla Shreck’s elementary class in Iowa City, IA chats with author/illustrator Duncan Tonatiuh!
Tinkering and Making: Battle Physics!

Find out more by visiting: http://tiie.w3.uvm.edu/blog/battle-physics-at-green-mountain-union-high-school
The Process

1. Identify the problem
2. Research potential solutions
3. Develop solutions
4. Select a solution
5. Present your design to a committee of experts
6. Revise and construct
7. Test
8. Redesign
9. Compete!

Relevance
Real Problems
Audience
Reflection
How does this process connect to the Standards?

- Problem
- Research/Inquiry
- Solution
- Present/Perform/Exhibit
- Reflect/Revise
- Present/Feedback
How does this process connect to the Standards?

Collaborate: Think

- Problem
- Research/Inquiry
- Solution
- Present/Perform/Exhibit
- Reflect/Revise
- Present/Feedback

Learners identify collaborative opportunities by:

1. Demonstrating their desire to broaden and deepen understandings.
2. Developing new understandings through engagement in a learning group.
3. Deciding to solve problems informed by group interaction.
Explore: Create

Learners construct new knowledge by:
1. Problem solving through cycles of design, implementation, and reflection.
2. Persisting through self-directed pursuits by tinkering and making.

Problem
Research/Inquiry
Solution
Present/Perform/Exhibit
Present/Feedback
Reflect/Revise
How does this process connect to the Standards?

Collaborate: Share

Problem

Research/Inquiry

Solution

Learners work productively with others to solve problems by:

1. Soliciting and responding to feedback from others.

Present/Perform/Exhibit

Reflect/Revise

Present/Feedback
Where else might this process work to deepen learning?
Wrapping up:

● Deep learning invites meaning and engagement.
● Audience, Voice & Choice, Relevance, Real Problems, and Metacognition get us there.
● We hope you have new ideas for invigorating your practice and your students learning.
Thank you!

#aaslstandards
@JPhillipsVT and @KateLechtenbert
Please join us for txlchat Tuesday at 8:00 pm (CST) to discuss the new #AASLstandards with @lenbryan25 See you there!!!