At least once a day, allow yourself the freedom to think and dream for yourself. Albert Einstein

Download Presentation: https://tinyurl.com/yccnywye

Shifts in our thinking about teaching and learning...

1. Instruction—From delivery of content to engagement with ideas
2. Goals: From knowledge to a focus on big ideas worth understanding
3. In approaches to content: From coverage to depth
4. In the learning process: From memorization to thinking

Agree? Disagree? What makes you say that?
What do we want the students we teach to be like when they are adults?

CHALK TALK Routine

What ideas come to mind when you consider this idea, problem, or question?

What connections can you make to others’ responses?

What questions come to mind when you think about the ideas and consider the responses and comments of others?

Dispositions

Curious
Skeptical
Open-Minded
Inquisitive
Imaginative
Strategic
Metacognitive
Reflective
Truth Seekers
Responsible
Independent
Listeners

Critical Spirit

Adventurous
Investigative
Original
Creative
Flexible
Questioning
Risk-Taker
Keen Mind
Considerate
Full of Wonder
Compassionate

So... how do we help to get them there???
"Children grow into the intellectual life around them."

Lev Vygotsky

Unpacking culture

3 Words
2 Questions
1 Metaphor

Making the Bridge:

- Find a partner that you haven’t talked to yet.
- Share with your partner your first 321 and your second 321.
- Discuss how your ideas shifted as a result of the reading.
Teaching for Open-Mindedness and Critical Understanding

#1: Create a Safe Environment

“What guidelines could we establish for ourselves that would not only make this a productive class, but would also make this a safe place for people to share what they are thinking and feeling, and a safe place for people to make mistakes and learn from them?”

#2: Follow Students’ Thinking

“Thinking skills develop as students make explicit their ways of thinking, hear alternative ways of thinking, and reflect on their thinking; therefore, the focus of our attention should not be on teaching students to think in a particular way, but on helping them explore and reflect on thinking processes they already use.”

#3: Encourage Collaborative Thinking

“Just as we need to teach students how to think clearly and independently, we need to teach students how to think clearly and collaboratively. Whether we use brainstorming, synectics, cooperative activities, or any of a variety of discussion techniques, we need to help students learn how to submit ideas for group consideration, build on each other’s ideas, and come to consensus on the ideas that seem most productive, coherent, attractive, and so on.”

#4: Teach the Questions Rather Than The Answers

“We need to help students ask the hardest questions, those that get at the underlying assumptions, root causes, and internal contradictions, and those that ask students to examine their own beliefs and attitudes.”
#5: Teach About Interconnectedness

“We have begun to see things less in a cause-effect or linear mode and more in a systems mode. Systems thinking is a distinctly different way of thinking. It views situations holistically, examines the interconnections between parts of a system, and looks for interventions that can have a corrective influence on the system as a whole. Taking a systems perspective gives students an appreciation for interdependence and helps them explore problems much more comprehensively.”

Teaching for Open-Mindedness and Critical Understanding

#6: Present and Have Students Enter Multiple Perspectives

“Our challenge is to help students reach beyond the limits of their own experience and enter the experience of others. For example ask students to suspend their disbelief temporarily and to attempt to understand how advocates of each perspective view the problem. Ask students to try to identify the truth in each position with which we can all agree. Examining each position from the perspective of the person holding it personalizes the position and makes it more available for consideration.”

Teaching for Open-Mindedness and Critical Understanding

#7: Build on Sensibilities

“When teaching thinking to students, we need to help them pay attention to intuition, to feelings, and to ethical considerations. We need to ask them not only how they think about something, but how it feels to them. We want to nurture a trust of that intuitive sense that something is or isn’t right.”

Teaching for Open-Mindedness and Critical Understanding

#8: Help Students Set Standards and Work from a Positive Vision of the Future

“In dealing with conflict situation, students could consider the criteria for a good outcome. In dealing with a social or political issue, students could consider how people 100 years from now would be affected by their recommendations. In dealing with a classroom decision, students could consider its impact on them years later or its impact on the school as a whole.”
Teaching for Open-Mindedness and Critical Understanding

#9: Provide Students With Opportunities for Acting on Their Thinking

“Thinking remains abstract until it is embodied in action. Through observing the impact of their actions, students experience the power and quality of their thinking. The feedback that they receive further refine their thinking.”

Problems with Teaching Process Skills

- We do not agree on which skills should be taught.
- We have not defined the skills to be taught.
- We rarely teach to thinking skills or any other process skills.
- Students are often exposed to skills overload.
- Skill strategies are rarely taught, yet often tested.
- Questioning strategies and exercises do not ensure mastery.

Teaching for Thinking......

1. Introduce the skill and give several examples.
2. Discuss its importance (when, where, how to use it).
3. Explain mental processes to do the thinking, model the process.
4. Let students practice the skill several times using personal, easy to understand content.
5. Put the skill into the content of your academic content.
6. Transfer the use of this skill in novel situations.

http://www.pz.harvard.edu/projects/visible-thinking
http://www.visiblethinkingpz.org/VisibleThinking/VisibleThinking1.html
http://pzartfulthinking.org
A Routine for Distilling the Essence of a Topic

Choose a color to represent a big idea that stood out for you
Create a symbol to represent one of those big ideas
Sketch an image to represent a big idea

SUNDAY, 27 FEBRUARY ANNE FRANK, PG 253

COLOUR
Anne is unsure of what the future will hold for her and Peter. Black, like a chalkboard, represents all the different possibilities that could be drawn for their future.

SYMBOL
In this diary entry Anne doubts she can keep her longing to reach Peter under control. She must wait until the silence breaks between them and they can act as their true selves.

IMAGE
Through this passage Anne talks about how she and Peter aren’t really as different as they seem on the surface. Just like these apples, they look different but taste similar.
Let’s Watch a Teacher Help Students Think Like a Historian
As you watch the video, see if you can determine how the teacher is helping students acquire the skills a professional would use in history.

What Makes You Say This?

GRADE 6 - Fractions

The sum of two fractions is 11 and 2/3. What might the fractions be?

Need to use mixed numbers or improper fractions.
A whole number cannot be made using... 11 wholes cannot be made using 2 common fractions.
At least one number needs to be a mixed number or improper fraction. 11 and 1/3 plus 2/6.
Your two fractions are 11 and 2/3 divided by 2 which is 5 and 5/6. Now fiddle around... 4 and 5/6 + 6 and 5/6.
11 and 5/6 = -1/6.
When using two mixed numbers one number has to be odd. 5 and 1/3 + 4 and 1/3.
What about 6 and 5/6 and 4 and 5/6?

Find an old camera. Bring it to class and tell your students that this camera was found in the closet of a retired soldier. The soldier was at the battle of Gettysburg. The film hasn’t been developed yet. If this camera was at Little Round Top, what pictures would it contain?
**Jigsaw**

**Form Groups of 4-6 people**
- Decide who will represent your group at each station.
- Representatives become the expert about a particular strategy by reviewing the descriptions and examples found at: https://tinyurl.com/k88ozc6
- Use your Frayer Diagram handout to record what your group believes is most important to share with their group.
- Return to your original group to share her/his expertise with the group.

**Four Choices**
1. Core Routines
2. Understanding Routines
3. Fairness Routines
4. Truth Routines
5. Creativity Routines

**Directions:** Complete the chart to show what you know about ___________. Write as much as you can.

- **Description of the Strategy**
  - Define or describe the strategy

- **Steps in Developing It**
  - What would be the steps one would follow in developing a lesson using this strategy?
  - Step #1, Step #2, etc.

- **Useful For**
  - Readiness? Interest? Learning Profile?
  - An assessment?
  - Making sense of what they are learning?
  - Showing what students understand?

- **Name of the Routine Goes Here**

- **Place to Use It in the Curriculum**
  - • Beginning, Middle, End of the Unit
  - • Would this strategy work better with particular content [discipline] areas?

**Tools for Communicating Thinking**
- Popplet: http://popplet.com
- Today's Meet: https://todaysmeet.com
- Padlet: https://padlet.com/my/dashboard
Curricular Tasks Promote Understanding and Routines Help Investigate the Ideas

The great questions want to be answered in each of us. We almost can’t help but attend when those questions are raised. To teach is to help our students raise questions they care about and to set out together to look for answers.

Add to your professional library..