Resistance turned upside down:

Engagement strategies to promote learning

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Goals:

1. To have fun
2. To turn-upside down our views on “resistant” students
3. Owning the 50% factor--- accepting responsibility for creating engaging learning opportunities for all students
4. Gain strategies to do #4

Line Up Activity

Question:

How many muscles are there in an elephant's trunk?

- **Line up based on your guess**
- **Pair up with someone you don't know to compare answers**
- **Realign after conversation**

http://www.cs.cmu.edu/~bingbin/

To promote engagement and learning we need:

- As Individuals:
  - Positive Relationships
  - Competency
  - Autonomy

To promote engagement and learning we need:

- As Learners:
  - Connections (background knowledge, vocabulary, experiences)
  - Choice (learning style, assessment, product, etc.)
  - TALKing/sharing/collaborating (positive relationships)
  - Modeling and ”rules of the game”
  - Summarizing and teaching others helps us internalize our learning

Goals of *Classbuilding*

STANDING

TALKING TO OTHERS

WALKING AROUND

- Meet and greet others
- Promote liking and respect for everyone
- Provide an interactive, non-threatening environment that creates mutual respect and promotes self-esteem
- Keep students active and energized
- Makes learning environment fun

"Classbuilding is the process by which a room full of individuals with different backgrounds and experiences becomes a caring community of active learners."

Spencer Kagan

COMMON THREADS

- Come up with at LEAST 5 things that EVERYONE has in common.
- Record your results creatively.

Goals of Teambuilding

FUN

EASY FOR ALL STUDENTS

NON-ACADEMIC

- All members can safely express their opinions, goals, and hopes
- All team members feel welcomed, appreciated, and valuable.
- All team members see similarities among themselves.
- All team members value their diversity.

Group Résumé

Task Groups:

- Create a group résumé with the following:
  - Group name or title
  - Interests/hobbies
  - Some things you might guess about us
  - Some things that might surprise you
  - Signatures
- Record on chart paper; be prepared to share with full group

Critical and Creative Thinking

"The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive, and discoverers, who can be critical and verify, and not accept everything they are offered." Jean Piaget

Critical Thinking Defined?

- “The ability not just to acquire knowledge but also to make sense of new information.” (Nold, H. 2017)

- “Critical thinking is the art of analyzing and evaluating thinking with a view to improving it.” (The Foundation for Critical Thinking, Retrieved 6/3/17)

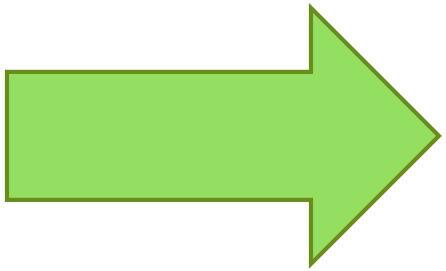
BUT RESEARCH SAYS:

- ”Only 1 out of 10 educators teach it (critical thinking) and that teacher usually teaches at a selective school or only teaches critical thinking to a select group of students.” (Seale, C. 2017).

- ”Many college faculty do not fully understand how to effectively teach critical thinking . . . And are not able to incorporate critical thinking exercises into the course curricula.” (Nold, H. 2017)

Critical Thinking Skills

- Identifying
- Analyzing



- Synthesizing
- Evaluating
- Questioning

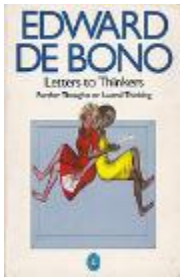
- **Knowledge** that can be used to:

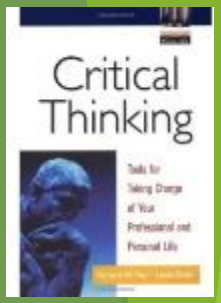
- Make a decision
- Solve Problems
- Come up with alternative actions

Students with Developing Academic Language Skills

- Students from homes in poverty and/or who are English learners typically have very high critical thinking potential and/or skills due to the many challenges they face in their daily lives--- but usually need help developing the mindset or disposition to consistently use those skills over the course of school and in careers.

Nine Strategies for Teaching Critical and Creative Thinking

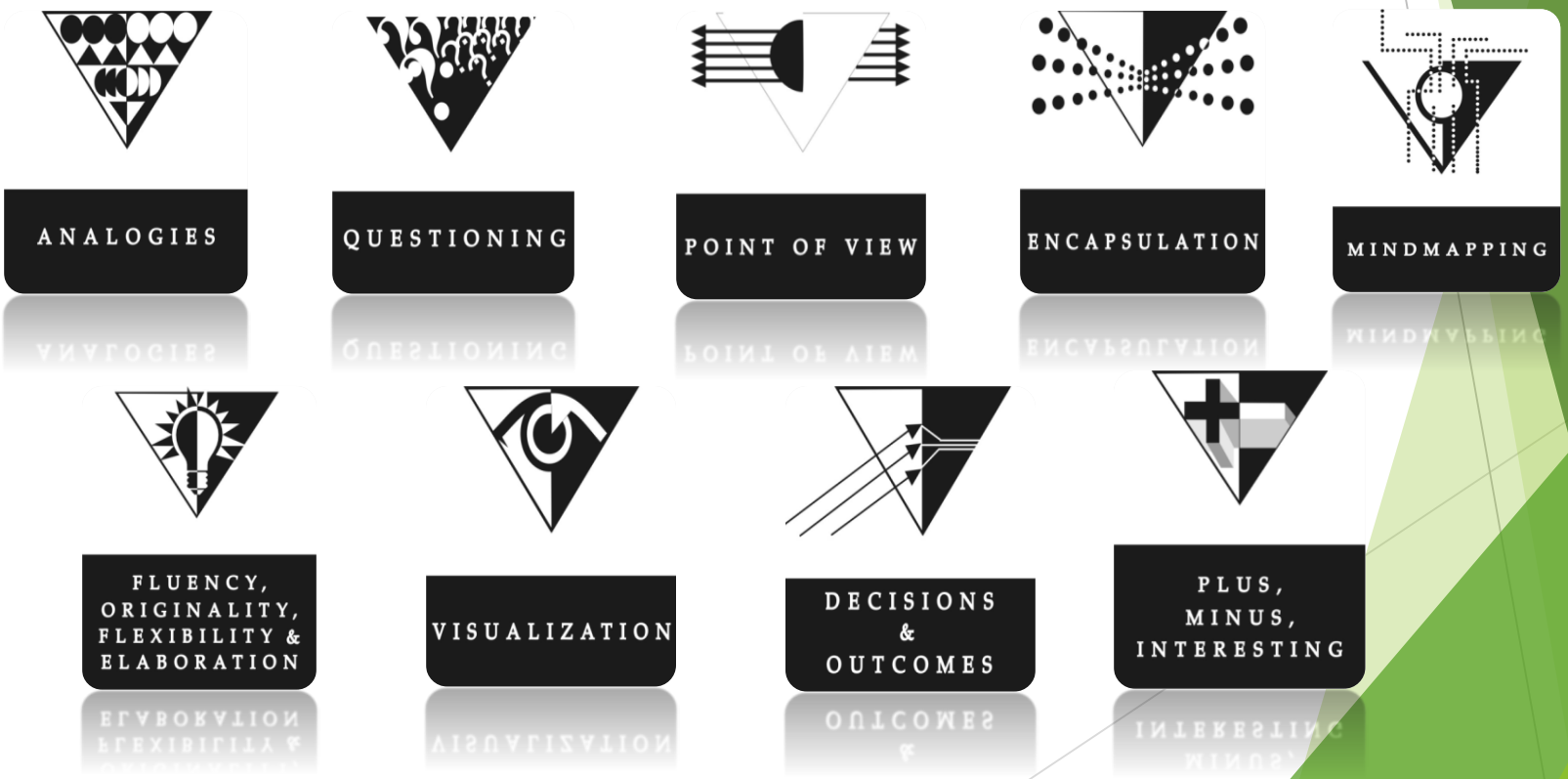




adapted from the work of . . .

Dr. Edward de Bono

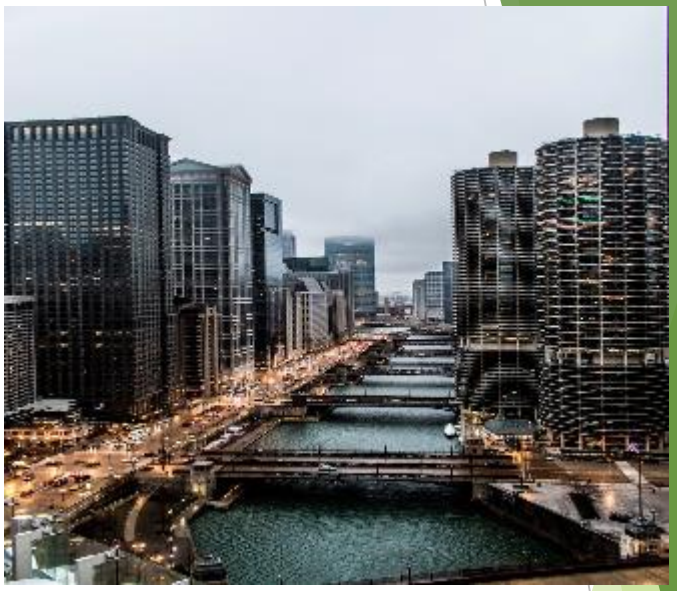
Dr. Richard Paul



Analogies

- Analogies allow students to make connections at a more sophisticated level.
- This structure for thinking helps students relate material to previously learned concepts as well as generate new comparisons.
- A facility for working with analogies gives students a structure for generating creative ideas, seeing complex relationships, and making unusual comparisons.

Four Corners



Benefits of using analogies:

- There are no wrong answers
- Students hear other students model language and can use the vocabulary they have (while acquiring new vocabulary) to describe their thinking
- Students can relate to their own complex and usually culturally different backgrounds when allowed to make their own connections
- When you have students brainstorm and write their thoughts first, it gives you time to go around and help individual students think through or formulate their responses.

Support for Academic Language Acquisition

- Provide sentence starters or sentence frames specific to the technical language of your content area---model appropriate responses
- Tell students there is no right or wrong answer
- Allow students to tell a partner before they write down their answer
- Encourage oral sharing of written responses.

Using Analogies in the Content Areas

Think-Pair-Share

How could analogies be used in your content area?

Questioning

- Active learners are always questioning.
- Students who take responsibility for asking their own questions become more productive and engaged in their learning processes.

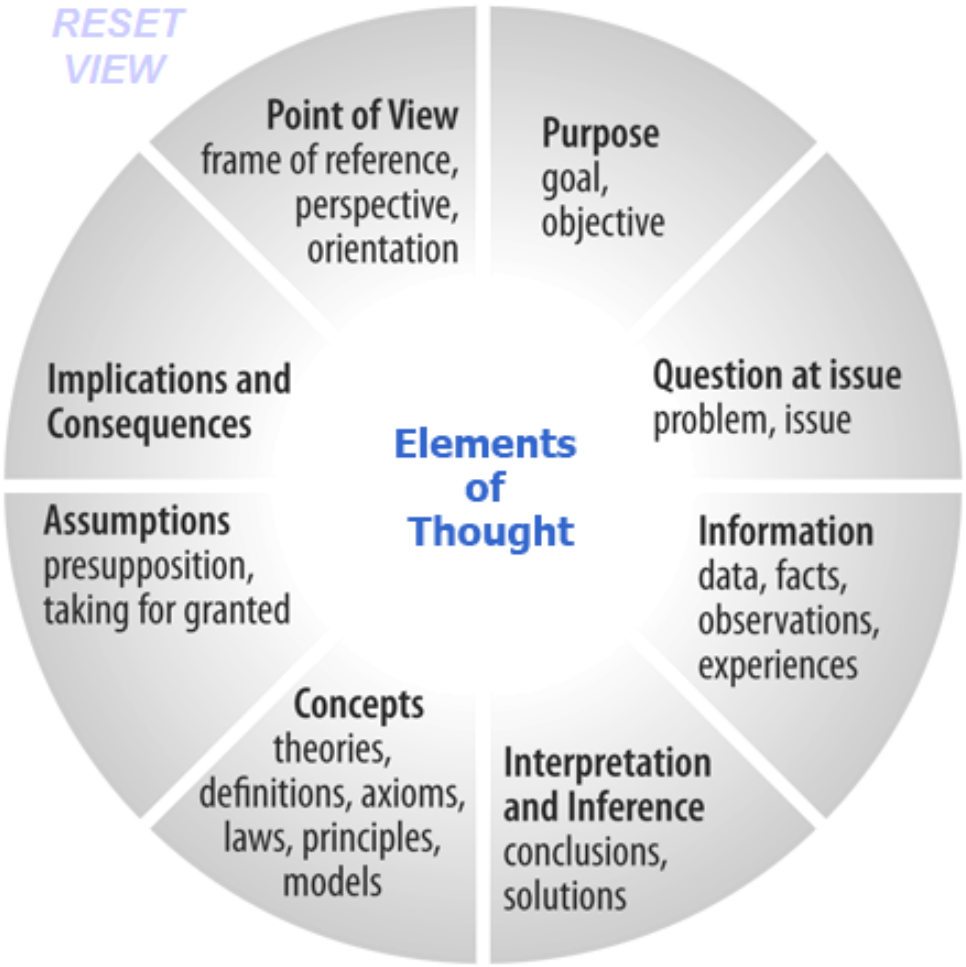
Students acquiring academic language need. . .

- Models of appropriate questions in terms of sentence *structure, inflection and tone*
- Practice with asking and answering questions using question and answer frames
- Guidance and practice with evaluating all the information they gather

To Analyze Thinking We Must Identify and Question its Elemental Structures

Use the elements with sensitivity to Intellectual Standards »

Clarity	Accuracy	Precision	Relevance	Depth
Breadth	Logic	Significance	Fairness	more...



Why the Analysis of Thinking is Important

Everyone thinks; it is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed, or downright prejudiced. If we want to think well, we must understand at least the rudiments of thought, the most basic structures out of which all thinking is made. We must learn how to take thinking apart.

All Thinking Is Defined by the Eight Elements That Make It Up. Eight basic structures are present in all thinking: Whenever we think, we think for a purpose within a point of view based on assumptions leading to implications and consequences. We use concepts, ideas and theories to interpret data, facts, and experiences in order to answer questions, solve problems, and resolve issues.

Thinking, then:

- generates purposes
- raises questions
- uses information
- utilizes concepts
- makes inferences
- makes assumptions
- generates implications
- embodies a point of view

http://www.criticalthinking.org/CTmodel/CTModel1.cfm

Encapsulation

- Encapsulating is the process of stating ideas in a concise, precise form. Encapsulation requires students to synthesize information and nuances in order to capture the essence of an idea, object, or activity – then communicate their thoughts clearly.

In ten words encapsulate what you have learned so far about critical and creative thinking. Turn and share with a neighbor.

Point of View

- Asking students to explore an idea from multiple points of view helps to broaden students' thinking and demonstrates that an idea should be examined from many angles before an opinion is formed.

- The discipline of examining an issue from many perspectives provides students with a good model for open-ended receptive thinking and empathizing with the opinions of others.

DeBono's Six Thinking Hats

Visualization

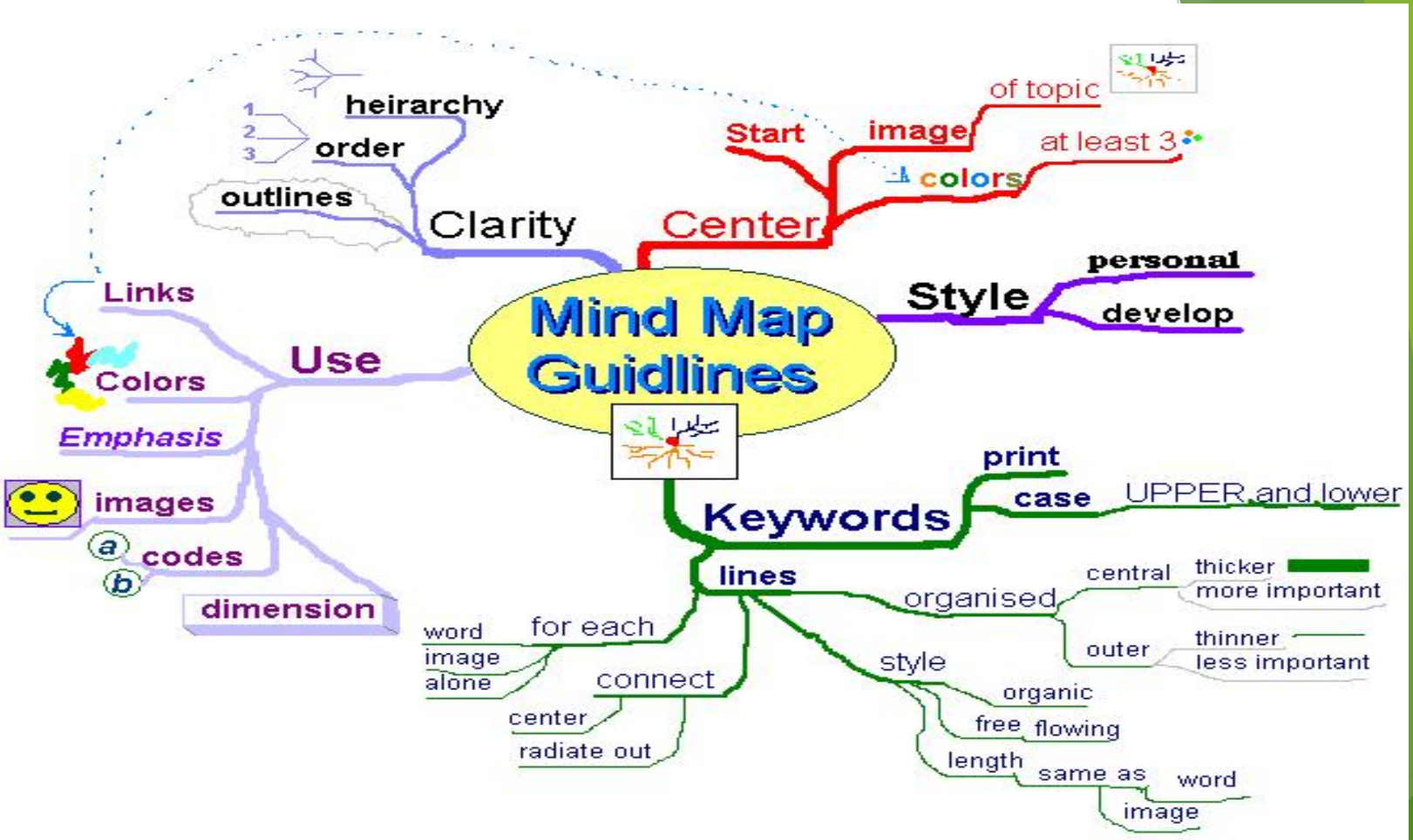
- Visualization opens up student thinking by stimulating the imagination with words, images, and/or simulated experiences.
- Visualization greatly increases the level and depth of students' understanding of an idea, a situation, and/or an outcome.
- The process can help students plan out an experience before execution. Students can "see" roadblocks or problems before encountering them and improve planning, goal-setting, and organization.

Discuss how visual thinking strategies might be used to improve problem-solving and goal setting for your students.

What sprouted in your discussions?

Mind Mapping

- A method of visual note taking that helps students organize information in unique and personal ways.
- It helps students retain, remember, and recall information, and helps to see the whole picture at once and make connections among related ideas.
- As students begin to work with more information in the content areas, mindmapping is especially important for visual and global learners.



https://www.youtube.com/watch?v=4wZ5wV5dPZc

Video of a Mindmap Being Created (Where Good Ideas Come From)

Look-Fors

Critical Thinking Strategies

- Instructor encourages students to judge or evaluate situations, problems, or issues
- Students are engaged in comparing and contrasting ideas (e.g., analyzes and generates ideas)
- Instructor provides opportunities for students to generalize from concrete data or information to abstract ideas.
- Students synthesize and summarize information within and across disciplines.

Look-Fors

Problem Solving

- Instructor employs brainstorming techniques and actively elicits input from all students.
- Students are engaged in defining and identifying the problem.
- Instructor engages students in solution-finding activities.
- Students explore problems with real world connections and/or applications.

Look-Fors

Research Strategies

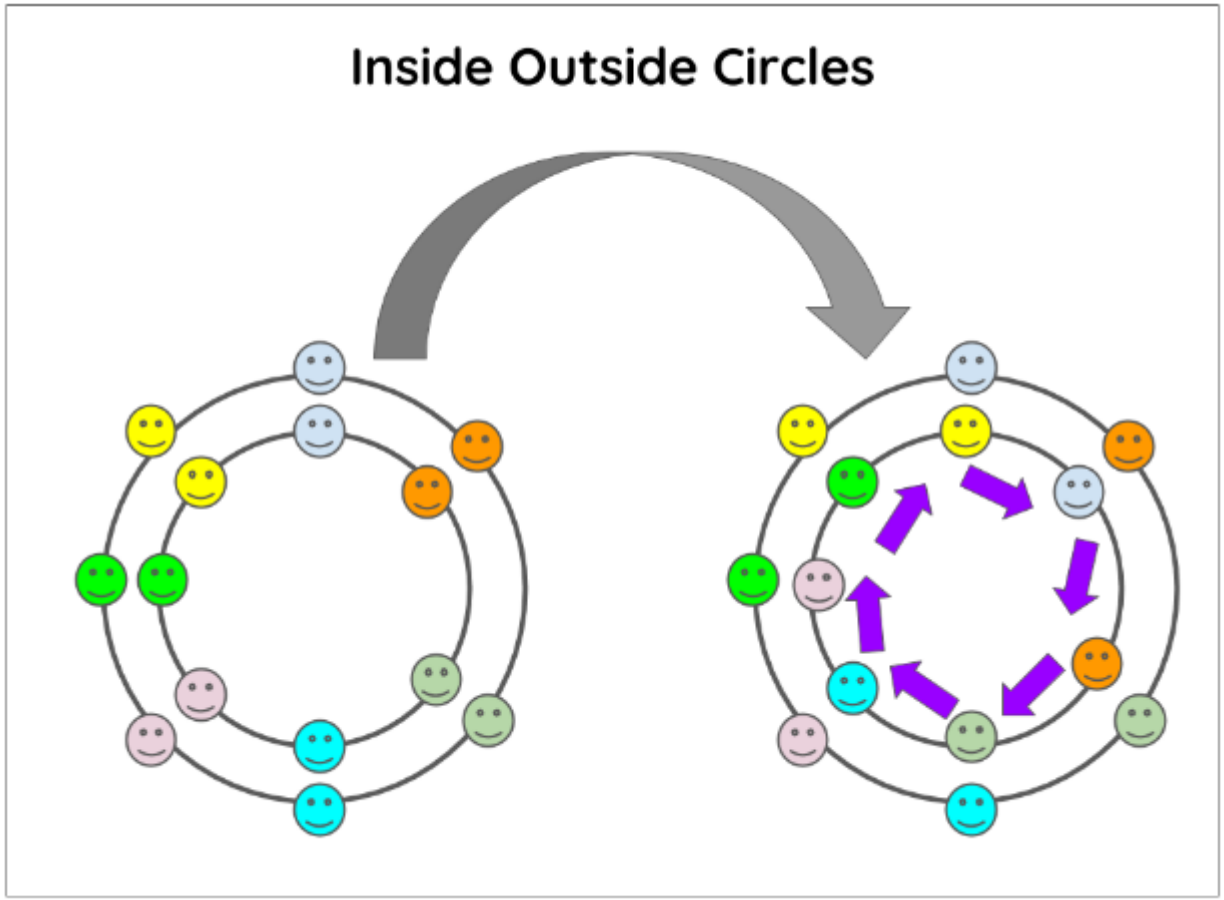
- Instructor requires students to gather evidence from multiple sources through research-based techniques (e.g., print, non-print, internet, surveys, interviews, etc.).
- Students analyze data and represent it in appropriate charts, graphs, or tables.
- Instructor asks questions to assist students in making inferences from data and drawing conclusions.
- Students determine implications and consequences of findings.
- Instructor provides time for students to communicate research study findings to relevant audiences in a formal report and/or presentation.

Class Builder: Inside-Outside Circle

What are the top strategies you are going to that will engage students? Be prepared to explain your choices.

-Make a list so you can share

Inside-Outside Circle



Graphic from
discoveriteach.blogspot.com

Whole Group Processing

- How could you use this structure with your students? What kinds of topics might work? Is there a certain kind of question that might work better for your content area?

Reflection

"I like this class because there's something different going on all the time. My other classes, it's like peanut butter for lunch every single day. This class, it's like my teacher really knows how to cook. It's like she runs a really good restaurant with a big menu and all."

FCPS Student

Questions to ponder:

- Do you have fun in your classes?
- What choices do you provide for your students?
- Do you build common experiences?
- How often do you smile at your students?
- Do you know your students' passions? Do you share your passions?