Warm-up!

- First line: Reluctantly, he handed over the key.
- Last line: The horse came back alone.

  - First line: She felt for the lock in the dark.
  - Last line: That summer seemed to last forever.
Outline for the Week

- Monday:
  - Idea, Process and Product
  - Guilford’s Components of Divergent Thinking
- Tuesday: Brainstorming
- Wednesday: Critical Thinking
- Thursday: ????

Objectives for Today

- Participants will be able to:
  - Tell how creative and critical thinking fit into the Enrichment Triad Model
  - Give an example that demonstrates the difference between convergent and divergent thinking.
  - Name and apply Guilford’s components of divergent thinking
Where do you Stand?

Strongly Agree

Agree

Disagree

Strongly Disagree

Creativity is mostly about the idea.
Creativity is about the end product.

Something must be original to be creative.
Creativity is consistent across grade levels.

Creativity is mostly about the process.
There is no way to increase your creativity.
The Enrichment Triad Model
Type II Enrichment

TYPE I
General Exploratory Activities

TYPE II
Group Tasking Activities

TYPE III
Individual and Small Group Investigation of Real Problems

The Type II Matrix
(Renzulli, 2001)

Cognitive Thinking Skills
- Creative Thinking Skills
- Creative Problem-Solving & Decision Making
- Critical and Logical Thinking

Learning How-To Learn Skills
- Listening, Observing, & Perceiving
- Reading, Note-taking, & Outlining
- Interviewing & Surveying
- Analyzing & Organizing Data

Character Development and Affective Process Skills
- Character Development
- Interpersonal Skills
- Intrapersonal Skills

Written, Oral, and Visual Communication Skills
- Written Communication Skills
- Oral Communication Skills
- Visual Communication Skills

Using Advanced Research Skills & Reference Materials
- Preparing for Research & Investigative Projects
- Library & Electronic Reference
- Finding & Using Community Resources

Type II Matrix:
- Cognitive Thinking Skills
  - Creative Thinking Skills
  - Creative Problem-Solving & Decision Making
  - Critical and Logical Thinking

Learning How-To Learn Skills:
- Listening, Observing, & Perceiving
- Reading, Note-taking, & Outlining
- Interviewing & Surveying
- Analyzing & Organizing Data

Character Development and Affective Process Skills:
- Character Development
- Interpersonal Skills
- Intrapersonal Skills

Written, Oral, and Visual Communication Skills:
- Written Communication Skills
- Oral Communication Skills
- Visual Communication Skills

Using Advanced Research Skills & Reference Materials:
- Preparing for Research & Investigative Projects
- Library & Electronic Reference
- Finding & Using Community Resources
CREATIVITY

Cognitive Thinking Skills
- Creative Thinking Skills
- Creative Problem-Solving & Decision Making
- Critical and Logical Thinking

RAISE YOUR HAND IF...

- YOU are creative.
**21st Century Student Outcomes and Support Systems**

- **Learning and Innovation Skills – 4Cs**
  - Critical thinking
  - Collaboration
  - Creativity

- **Core Subjects – 3Rs and 21st Century Themes**

- **Information, Media, and Technology Skills**

- **Standards and Assessments**

- **Curriculum and Instruction**

- **Professional Development**

- **Learning Environments**

---

**Convergent Thinking**

2 + 2 = 4

- Data
- Facts
- Answer
- Data

**Divergent Thinking**

2 + 2 = fish

- Idea
- Stimulus
- Idea
- Potential Solution
Guilford’s Components of Divergent Thinking (FFOE)

- **Fluency** refers to the number of different ideas one can produce.
- **Flexibility** refers to the variety among the ideas one produces.
- **Originality** refers to how unusual are the ideas one produces.
- **Elaboration** refers to richness of detail in the ideas one produces.

### Classifying

<table>
<thead>
<tr>
<th>Letters</th>
<th>Vowels</th>
<th>Parts of Speech</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baby</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>2. Bad</td>
<td>3</td>
<td>ADJ</td>
</tr>
<tr>
<td>3. Bring</td>
<td>5</td>
<td>V</td>
</tr>
<tr>
<td>4. Buy</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>5. Beautiful</td>
<td>9</td>
<td>ADJ</td>
</tr>
<tr>
<td>6. Below</td>
<td>5</td>
<td>ADV or P</td>
</tr>
<tr>
<td>7. Banana</td>
<td>6</td>
<td>N</td>
</tr>
</tbody>
</table>
Make it More Rigorous

- First graders: words that start with the letter B
- More advanced:
  - Geography: name as many cities as you can think of that start with the letter B.
  - cities in the US,
  - cities in the world,
  - cities on a river . . .

Think …
of something that is blue
Flexibility: Things that are Green
Round 1

- A jealous person (“green” with envy)
- A gardener's thumb!
- A “green” card!
- John Green!
- Go “Green!”
- A “Greenhorn!”

Flexibility: Things that are “Green”
Round 2
Cure for Cancer: Cancer Patients Cured With Polio Virus in Duke University Trial
Konmari-Folded!

BEFORE

AFTER
How much do you spend on a bottle of wine?

I would guess about half an hour...
Elaboration: Name something “green”

- grass
- Freshly cut grass
- Freshly cut grass glistening with dew
- Freshly cut grass glistening with dew on an early summer morning

Fog

The fog comes on little cat feet. It sits looking over harbor and city on silent haunches and then moves on.

- Carl Sandburg
Originality

- **Originality** is based on each response compared to the total number of responses from a specific group of test takers.
- Originality is context specific.

Challenge Round!

- **Demonstrate flexibility:**
  What are different uses for a soup can?
Challenge Round!

■ Demonstrate originality:
  - What were the different ways you could have come to school this morning?

Challenge Round!

■ Demonstrate elaboration:
  - Tell a story about something white.
Debrief

- Tell how creative and critical thinking fit into the Enrichment Triad Model
- Give an example that demonstrates the difference between convergent and divergent thinking.
- Name and describe the four components of Guilford’s Components of Divergent Thinking

Your Three Obligation

- Develop your talents
- Pass on what you learn
- Leave the world better than you found it
References

