Creative Thinking Lesson

Lesson Objectives:

- Expose students to creative thinking processes
- Complete a team-based creative thinking exercise using the SCAMPER method

Lesson Overview:

- Introduce the concept of “creative thinking” via 1-3 short activities
- Discuss & develop understanding of creative thinking as a class
- Team-oriented scenario activity using SCAMPER method: Trix cereal (or other cereal)

Materials:

- Overhead projector
- Lesson PPT
- Trix (or other breakfast cereal—samples in ziploc baggies for student teams); get cereal samples in library or bring your own
- SCAMPER charts for teams (1 per team—see below)—or display via projector during activity
- Creative Thinking Teams—student handout

Introduction to Creative Thinking:

- Ask students to answer this question by a show of hands: “How many of you would consider yourselves creative?”
- Then show students this link, and do 1-3 of the exercises as a class
  
  [http://creativethinking.net/DE18_UnconventionalProblem.htm?Entry=Good](http://creativethinking.net/DE18_UnconventionalProblem.htm?Entry=Good)

- After working through these, explain that:
  - thinking creatively is an ability that all of us have, and today’s class focuses on exploring how we can all think more creatively when approaching any kind of task, problem, or assignment.
- Define Creative Thinking as...
  - Exploring ideas, generating possibilities, looking for many right answers rather than just one.
  - Show them the chart comparing critical and creative thinking
    - stress that both types of thinking are really vital to success in school and life—
    - but sometimes we think that creativity is supposed to stay in the art room, or we aren’t creative—which is not true!
- Next, project the photo of the HP Printer.
  - Ask them:
    - What is this?
    - What is it used for?
- Next, tell students that: “We are going to watch this video—as you are watching, be prepared to share how this video demonstrates creative thinking.”

Then show students this video: [http://vimeo.com/5437401](http://vimeo.com/5437401)

And then this video: [http://vimeo.com/15121144](http://vimeo.com/15121144)
• Ask students: How do these videos demonstrate creative thinking?
• After sharing ideas, explain that this video was an entry to the D&AD Student Awards contest by Hewlett Packard, which asked for video entries to:
  "Present an idea which promotes HP Workstations ability to bring to life anything the creative mind can conceive."

Use these notes below to elaborate for students that CREATIVITY IS...

• An Ability...
  o the ability to imagine or invent something new.
  o the ability to generate new ideas by combining, changing, or reapplying existing ideas. Some creative ideas are astonishing and brilliant, while others are just simple, good, practical ideas that no one seems to have thought of yet.
  o that everyone has—we just have to cultivate it!

• An Attitude.
  o Creativity is also an attitude: the ability to accept change and newness, a willingness to play with ideas and possibilities, a flexibility of outlook, the habit of enjoying the good, while looking for ways to improve it.
  o We are socialized into accepting only a small number of permitted or normal things, like chocolate-covered strawberries, for example. The creative person realizes that there are other possibilities, like peanut butter and banana sandwiches, or chocolate-covered prunes.

• A Process.
  o Creative people work hard and continually to improve ideas and solutions, by making gradual alterations and refinements to their works.
  o Contrary to the mythology surrounding creativity, very, very few works of creative excellence are produced with a single stroke of brilliance or in a frenzy of rapid activity. Much closer to the real truth are the stories of companies who had to take the invention away from the inventor in order to market it because the inventor would have kept on tweaking it and fiddling with it, always trying to make it a little better.
Introduce the SCAMPER Method:

- Tell students that one technique they can use to help spark creativity is the SCAMPER Method:

SCAMPER is a general-purpose checklist with idea-spurrring questions.

SCAMPER is based on the notion that...

- everything new is a modification of something that already exists.
- Each letter in the acronym represents a different way you can play with the characteristics of what is challenging you to trigger new ideas.

TO USE the SCAMPER technique:

1) STATE the problem you’d like to solve or the idea you’d like to develop. It can be anything: a challenge at school or in your life; or maybe a product, service or process you want to improve.
2) ASK QUESTIONS about that problem/idea using the SCAMPER checklist to guide you.

Following the SCAMPER recipe, here are a few questions you could ask:

S (Substitute): "What can I substitute?"
C (Combine): "How can I combine this with other things?"
A (Adapt): "What can I adapt or copy from...?"
M (Magnify/Modify): "What can I magnify or put more emphasis on...?"
P (Purpose--Put to Other Uses): "How can I put this item to other uses?"
E (Eliminate): "What can I eliminate or simplify...?"
R (Rearrange/Reverse): "How can I change, reorder or reverse...?"

<table>
<thead>
<tr>
<th>S = Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>C = Combine</td>
</tr>
<tr>
<td>A = Adapt</td>
</tr>
<tr>
<td>M = Magnify/Modify</td>
</tr>
<tr>
<td>P = Purpose (Other Uses)</td>
</tr>
<tr>
<td>E = Eliminate (or Minify)</td>
</tr>
<tr>
<td>R = Rearrange (or Reverse)</td>
</tr>
</tbody>
</table>
Creative Thinking Team Challenge

Place a box of ready-to-eat cereal (like Cheerios or Trix) on a desk or ledge at the front of the room, or use an image from the Internet.

*Get sample bags of cereal from the library—or bring own cereal from home for activity.

Read the following Scenario to students:

Now we are going to do a scenario activity where you will get to activate your creative thinking skills in a real-world simulation.

You are part of a marketing team for the food company, General Mills.

Today, your team was given the following task:
The company wants to expand its market share, and sell more cereal—but NOT necessarily as a food product. Therefore, the company now wants your team to generate as many possible alternative uses (besides as a breakfast cereal) for a specific product: Trix cereal.

For some of the possible alternative uses, your team is allowed to combine or draw upon other items, tools, and objects if needed to allow the alternate use to be completed, realized, or make sense.

Your boss has asked your team to present your ideas to the executive board, which will include prospective investors. The stakes are very high—if the board does not think the other uses are creative enough, you may lose your job at the company.

In teams of 4, you will create a proposal of your top 5 ideas for how Trix cereal could be used in different ways, re-marketed, and/or combined with other products, items, tools, or processes.

Use the SCAMPER chart and the handout to come up with ideas to present to the board. Each team will have no more than 3 minutes to share their ideas. You can be as creative as you want in presenting your ideas to the board.

Team Resources:

- Cereal samples
- Image of cereal box
- SCAMPER Chart
- Activity handout – student
- Team members—each others’ brains!
- Whatever other tools, objects, resources that are available in this room
You are part of a creative marketing team for the food company, General Mills.

Team Task: Generate as many possible alternative uses (besides as a breakfast cereal) for Trix cereal.

Use the SCAMPER chart, your team, & this handout to come up with ideas to present to the board.


<table>
<thead>
<tr>
<th>SCAMPER</th>
<th>TRIX CEREAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Substitute</td>
</tr>
<tr>
<td>C</td>
<td>Combine</td>
</tr>
<tr>
<td>A</td>
<td>Adapt</td>
</tr>
<tr>
<td>M</td>
<td>Modify/Magnify</td>
</tr>
<tr>
<td>P</td>
<td>Purpose (Re-purpose)</td>
</tr>
<tr>
<td>E</td>
<td>Eliminate</td>
</tr>
<tr>
<td>R</td>
<td>Reverse / Rearrange</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>Creative Thinking</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>analytic</td>
<td>generative</td>
</tr>
<tr>
<td>convergent</td>
<td>divergent</td>
</tr>
<tr>
<td>vertical</td>
<td>lateral</td>
</tr>
<tr>
<td>probability</td>
<td>possibility</td>
</tr>
<tr>
<td>judgment</td>
<td>suspended judgment</td>
</tr>
<tr>
<td>focused</td>
<td>diffuse</td>
</tr>
<tr>
<td>objective</td>
<td>subjective</td>
</tr>
<tr>
<td>answer</td>
<td>an answer</td>
</tr>
<tr>
<td>left brain</td>
<td>right brain</td>
</tr>
<tr>
<td>verbal</td>
<td>visual</td>
</tr>
<tr>
<td>linear</td>
<td>associative</td>
</tr>
<tr>
<td>reasoning</td>
<td>richness, novelty</td>
</tr>
<tr>
<td>“Yes, but...”</td>
<td>“Yes, and...”</td>
</tr>
</tbody>
</table>

Resources:

http://www.dumblittleman.com/2008/05/10-super-creative-uses-for-everyday.html

http://ecoble.com/2008/03/12/10-unusually-creative-ways-to-recycle-ordinary-objects/

http://creativethinking.net/DE18_UnconventionalProblem.htm?Entry=Good

http://www.virtualsalt.com/crebook1.htm