The environment, or climate, that we establish in our classrooms greatly influences all types of thinking and learning. Creative potential in particular is affected by classroom climate. Our attempts to enhance the creative abilities of our students hinges upon creating a classroom climate that is tolerant of creative expression. Rogers (1962) noted three connected processes needed to establish psychological safety in the classroom: acceptance of each student's unconditional worth, empathy, and an absence of external evaluation. Based on these processes, what tools can teachers use to establish a classroom climate where students feel safe to express their ideas without judgment from their teacher or peers? We have found that two simple strategies, encounter and brainstorming, are useful for fostering a safe classroom climate.

Encounter Lessons

Encounter lessons involve experiences where students “encounter” ideas, people, and materials that actively employ the senses. These activities stimulate positive feelings of self-worth and creativity by utilizing students’ strengths and imaginations. Students also increase both their self-understanding and empathy toward others by entering the mind of another in order to see the world from their point of view.

The guidelines for encounter lessons include: small groups of eight to ten students, 20-30 minutes in length, and an open-ended format with all responses being acknowledged and accepted. The lessons typically focus on questions of identity, awareness, isolation, risk or danger, and wisdom. Here is an example social studies encounter lesson:

Pass the Musket Ball: An Encounter Lesson on the American Revolution

In this lesson, students consider the conflicts of the American Revolution and how conflict impacts our everyday lives. Students will “pass the musket ball” (ball of clay left to harden overnight) as the teacher displays a picture or map of the battle of Kings Mountain. The teacher asks students to close their eyes and imagine they are musket balls at the battle of Kings Mountain. The teacher describes the situation through a descriptive story, sharing details such as: “there is a sudden flash of light and heat that hurls you through the air at high speed.” The teacher then asks each student to respond to the following questions:

1. What kind of musket ball are you? Do you belong to a Patriot or British soldier? What do you look like? Describe your appearance.

2. What do you see, hear, smell, taste, feel? You ricochet off a tree and split into several pieces. How will you find the others?

3. What do you see, hear, smell, taste, feel? You ricochet off a tree and split into several pieces. How will you find the others?

4. You hear a loud blast to your right. What do you think it is?

5. What role did you play in ending the battle? How did your role in the battle help resolve the conflict between the Patriots and the British?

Brainstorming

Brainstorming is another strategy for creating a safe classroom climate. Teachers often use brainstorming to gauge student understanding, help students with writing projects, and assist students with complex problem-solving. Brainstorming at its most basic level is the generation of ideas, or ideation. Similar to the encounter process, brainstorming also uses guideposts, or rules. These include:

- All ideas are accepted.
- Try to think of as many ideas as possible.
- Everyone’s ideas are valued.
- Combinations and improvement are sought (sometimes called piggybacking or hitchhiking).
- Unconstrained or uninhibited ideation is welcomed (also called freewheeling).

Encouraging many ideas supports the notion that ideas become increasingly more creative as we generate more of them. Once students have identified typical or common ideas, they are then able to move to a place where ideas become original. Brainstorming is a wonderful example of how group collaboration and think-tanks work; collaborating or generating ideas in groups can yield more ideas and therefore, more creative responses. The quintessential phrase “think outside the box” plays an important role in brainstorming as ideas that are wild, silly, or without constraint seem to stimulate and improve existing ideas.

Below are some examples of how brainstorming might be used in the classroom:

1. How might a plant cell feel?
2. What might a conversation be between Juliet Capulet and Hermione?
3. How many different ways might I solve this math problem?

By establishing ground rules and providing opportunities for students to engage in brainstorming, teachers create a space where students’ ideas are valued. When students are
able to brainstorm responses that ask them to look at things from different perspectives, they develop the empathy needed to consider and combine multiple viewpoints. If they are able to offer their thoughts freely, they engage in the risk-taking that is needed to share new and different ideas.

**Reference**

**THP**

**special populations**

support and share the message about specialized services
- Provide opportunities to allow students to demonstrate their giftedness in front of their peers (school programs, bulletin boards, class presentations, competitions, etc.) to increase their self-esteem
- Empower students with self-advocacy skills so that they can play an active role in determining what kind of instruction and activities are most effective for them

As our school districts improve efforts to identify and provide services for diverse gifted learners, the identification of ethnically diverse students with disabling conditions should also improve. To help with these talent search efforts, educators are encouraged to look more deeply at students who have been labeled with special or disabling conditions to determine if there are students within these groups who may also have high potential in a particular content area. These 3E students deserve attention for their gifts as well as the support needed to address their special needs.

**References**

**Resources**
Rivera, J. (Sept 2016). This bias may be hurting your gifted or 2e kid. www.jadeannrivera.com/implicit-racial-bias/

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**taking the creative leap**
continued from page 3

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**socially scientific**
continued from page 10

ogy (and its closely related kin, Augmented Reality) is a viable career path for innovators in the STEM disciplines. So, enthusiastically embrace, use, and rejuvenate your science class in 360 VR.

**References**

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**curriculum corner**
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Choosing sophisticated curricular resources as a critical consumer of educational materials is essential. Consider the following elements of a curriculum unit and if these question components are present:
1. Additional Extension/Enrichment questions that provide more complexity,
2. Varied questions touching on all cognitive levels of learning and understanding,
3. Guidance and suggestions for how questions within the curriculum can be modified and adapted to be more complex as needed.

Enhancing opportunities for students to develop high-level questions is an important element in advanced curriculum design and delivery. Critically contemplating the use of questioning in the curriculum has the potential to enhance the critical thinking opportunities presented to students through advanced questioning. Educators should review the questioning sets in classroom curriculum for sufficiently advanced cognitive levels and increase the challenge level by evaluating and revising questions.

**Additional Reading**

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