CONNECTED EDUCATION EVERY LEADER, EVERY TEACHER, EVERY LEARNER



CULTIVATING

CREATIVITY

IN THE CLASSROOM 10 TIPS & TECHNIQUES

A BRIDGE Knowledge Product





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LINKING INNOVATORS IN EDUCATION

The following resource may be used by educators to foster creativity and divergent thinking in the classroom. The document includes a discussion on the importance of creativity in schools as well as 10 innovative approaches to help you promote out-of-thebox thinking in your classroom.

Why Creativity?



"Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution. It is, strictly speaking, a real factor in scientific research."

Albert Einstein

This past decade has seen rapid and massive advances in technology that have opened doors to new fields of study and created new industries overnight. As technology has evolved, new careers have emerged in fields such as 3D printing, robotics, nanotechnology, social media expertise and software development. So what will the next 10 years bring? Many of our current learners will work in jobs or pursue careers that don't yet exist. Simply learning a specific skill set or a body of discrete facts will not equip them to be adaptable, innovative and entrepreneurial. Creative problem solving prepares learners for life beyond the classroom in an ever evolving world.

Convergent Thinking vs. Divergent Thinking

'Convergent thinking' refers the ability to give the 'correct' answer to standard questions that do not require significant creativity. For instance, standardised multiple-choice tests. Conversely, 'divergent thinking' is a thought process or method used to generate creative ideas by exploring many possible solutions. In schools, divergent behavior is often discouraged when learners are scared to say or do the 'wrong thing' in class. This system of subtle-convergence is enforced by a grading culture that systematically penalises learners for being 'wrong', and by allowing a school environment in which learners tease those who exhibit nonnormative behaviors. So, if 'divergent thinking' is key to being creative, it becomes clear that teachers must encourage learners to be open with their imaginations and

ensure their divergent ideas are welcomed.

| Convergent | Divergent |
|--|--|
| Restricts to the | Explores possibility |
| correct or best | without limits |
| answer | Generative/Creative |
| Analytical/ Evaluative | Open-ended |
| Standardised testing, | projects, problem- |
| memorisation, rote | based learning, |
| learning | collaboration |

So, how might teachers incorporate divergent thinking and creativity into their teaching?

10 Ways to Inspire Divergent Thinking in the Classroom

1. Break the Question/Answer Paradigm

- a) Ask open questions (as opposed to closed, yes/no):
- How would you describe _____?
- What is known and unknown about _____?
- What are some other ways to look at

Flip the sequence and have learners devise questions.

2. Open-Ended Projects, Real World Problems

a) Involve learners in determining problems/questions
 to which they'll apply their new learning. Require
 research and collaboration.

b) Learners pose problems by tapping into their own lives and real-world challenges. For example:

- "Prepare a case on a compelling human rights issue to be argued before the South African Constitutional Court."
- "Devise a way that we can grow vegetables without using pesticides."

3. Inquiry-based Feedback

a) Instead of simply value-based marks, combine inquiry and deep observation for more openended, in-depth feedback. b) Teachers can offer questions and observations and have learners revise their work based on the feedback. This approach can also be used for peer evaluation.

c) Phrases such as, "I noticed that . . .?," "why . . .?," "how . . .?", "what would happen if you. . .?"

4. Highlight Innovation

a) Design classroom awards or bulletin boards to showcase learners' different ways of solving a problem, or shout-out their creative solutions to a real world scenario or challenge they faced.

5. Don't limit Assignments to One Form

a) You can provide them the subject to cover, but give them some freedom in how they complete it. When you allow more formats in the way learners create and learn,

they'll have more opportunities to engage with the work they do and will become more invested in it.

6. Create Space for Learner Questions/Thoughts

a) Encourage curiosity by creating a bulletin board or online discussion board where learners can continue to engage after the lesson through questions or comments. Once a week, intentionally address those questions.

7. Introduce Unconventional Learning Materials

- TED talks
- Podcasts
- Daily newspaper

- Artefacts
- Music
- Visual

8. Encourage Discussion

a) Even in math & science, they can discuss the different ways they approached a problem and

- think more deeply about the material.
- learn to better communicate their ideas and opinions.
- listen to other learners' opinions and think critically about their contributions and ideas.
- challenge each other intelligently and build off of each other's ideas.

9. Design Multidisciplinary Lessons When Possible

a) History and English teachers could collaborate to teach a particular time period and the literature from that time

period at the same time.

b) A lesson or unit on "Geometry through Art" could explore the way geometric concepts are employed in visual arts.

10. Creative Class Warm Ups

a) Incorporate quick puzzles at the beginning of class to activate learner thinking and engagement.

b) When does 1 + 1 = 24?

c) You are only allowed to move/touch one glass. Describe what you need to do so that the full and empty glasses alternate.

The following resource draws on a presentation given by Amelia Herbert, a member of Teach With Africa, at the Axis Education Summit in July 2016. To access Amelia's presentation, click here

For more tips and techniques on fostering creativity in the classroom, click here.