Yes, <u>you</u> can measure students' creativity: An Introduction to the Line Completion Creativity Task

Why would teachers and schools want to measure creativity?

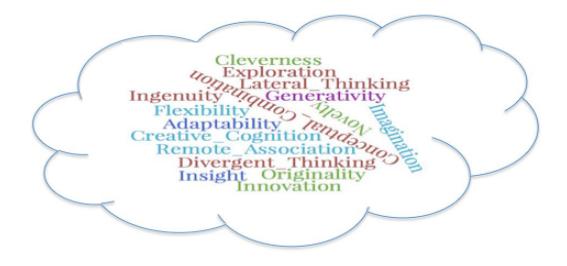
As educational researchers, we believe there are many benefits for measuring creativity in the classroom. In our <u>research</u>, we have found that schools around the globe talk about the importance of fostering creativity in their students, but rarely have tools or measures that address creativity. In this post, we share an easy-to-use creativity assessment that teachers and schools can self-administer to help better articulate and assess creativity in their students.

This simple assessment task can provide teachers with a more objective understanding of creativity and how it manifests in their students. Like using traditional academic tests, measuring creativity offers an opportunity to validate your impressions of students strengths and abilities and provides empirical feedback for tailoring teaching and learning in the future.

What is creativity and how can it be measured?

Most academic tests measure a set of skills or students' content knowledge where there is typically a single correct answer to each question. By contrast, problems that engage students' creativity often have many possible answers and not a single, clear-cut solution. As researchers, we know many educators and schools value creativity, but it can be more challenging to understand and measure.

Because creativity is such a complex phenomenon and can be expressed in so many different ways, researchers have categorized different attributes of creativity. So, what we tend to think of as "creativity" rather generically has been further explored and defined by researchers into more specific attributes of creative thinking:



Researchers usually focus on examining one specific type of creativity such as Lateral Thinking or Mental Flexibility. For example, when assessing Mental Flexibility we seek to address if students can generate and identify different possible solutions to a problem. The Line Completion Creativity Task measures students' Adaptability, or how successfully students can adapt their thinking to incorporate new content or to avoid obstacles.

Administering the Line Completion Creativity Task

Building on over <u>50 years of creativity research</u>, provided here is one simple assessment task for measuring creativity in students: the Line Completion Creativity Task. Using the templates and resources provided below, this assessment activity is designed for grade 4-12 students and can be scored by classroom teachers. In this activity, students are provided 6 minutes to "create the most creative picture you can" and "describe what they drew in 2-3 sentences."

Blank Line Completion Creativity Template:

Name:_____Date:_____School:_____

Instructions: You will have <u>6 minutes</u> to complete this task. You can begin when the proctor tells you to and you must put your pencil down when the proctor tells you to stop.

Using the figure below, draw the most creative picture you can and answer the question.

f Describe what you drew in 2-3 sentences.

NOTES TO IMPROVE TEMPLATE: -Font needs to be changed -Space between lines is too small -Not enough lines for 2-3sentences -Change School to Classroom or Grade level

To introduce the Line Completion Creativity Task, provide each student with a blank <u>template</u> student form. Teachers can officiate the activity by reading the directions aloud to their class and may encourage students to create their own unique creative image, but should otherwise try to remain neutral. In the six-minute assessment period, students should be encouraged to work independently and to describe their drawing in accompanying text box. At the completion of the six-minute assessment period, student period, student work is collected for scoring by the teachers.

Scoring the Line Completion Creativity Task

Using the templates and rubrics provided here, each student's work can be scored by their teacher on four criteria: <u>Overall Creativity</u>, <u>Originality</u>, <u>Incorporation</u>, and <u>Elaboration</u>.

Step 1: Teachers should first perform an initial review of all students' work from their class by quickly examining each student's completed assessment.

Step 2: Following this quick review, each student's assessment is individually scored for <u>Overall Creativity</u> based on teacher's general impression of drawing and text. Using a 0-10 point scale, each student's drawing and accompanying text receives a single score representing the teacher's overall impression of its creativity:

Score:	0	1	2	3	4	5	6	7	8	9	10
Overall Creativity	Drawings/text with less creative responses						dep	awings/ citing n ve resp	nore		

Step 3: Next, teachers will again examine each student's work individually a second time to provide a score on <u>Originality</u>, <u>Incorporation</u>, and <u>Elaboration</u>:

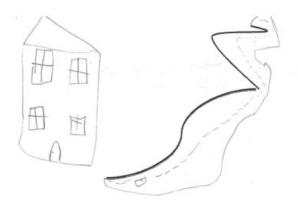
- Originality: When comparing the drawing/text to those made by your other students, how relatively different or original is this student's drawing? Student work is scored using a 3-point scale (0, 1, 2) where smaller scores indicate more common depictions and larger scores indicate more unique depictions (3-point scale: 0, 1, 2). Unlike the other scores, each student's Originality score is relative to the drawings collected from the rest of your class.
- <u>Incorporation</u>: To what extent did the student incorporate the line into drawing and text? Student work is scored using a 3-point scale (0, 1, 2) where smaller scores indicate little to no incorporation of the line in the students drawing/text and larger scores indicate the line plays a <u>pivotal</u> role in the student's depiction.
- <u>Elaboration</u>: To what degree do students convey detail in their drawing and text? Student work is scored using a 3-point scale (0, 1, 2) where smaller scores indicate less detail and larger scores infer greater detail.

Score:	Originality	Incorporation	Elaboration
0	Drawing and/or text depicts the <u>most</u> <u>common image/idea</u> compared to the rest of class	Template line is <u>not</u> <u>used</u> into student depiction	Drawing and text exhibit little to no detail
1	Drawing and/or text depicts a <u>fairly</u> <u>common image/idea</u> compared to the rest of class	Template line is used in student's drawing but has a minimal impact on overall depiction	Drawing and/or text exhibit only rudimentary details (i.e. basic stick figure)
2	Drawing and/or text depicts a <u>somewhat</u> <u>unique image/idea</u> compared to the rest of class	Template line is <u>effectively incorporated</u> in student depiction and plays a role in the overall picture	Supporting details are depicted in drawing and/or text
3	Drawing and/or text depicts an <u>entirely</u> <u>unique image/idea</u> compared to the rest of class	Template line plays a <u>pivotal</u> role in the students depiction	Extensive detail is depicted in <u>both</u> drawing and supporting text

Teachers can record each student's scores using a simple (make a template downloadable) spreadsheet:

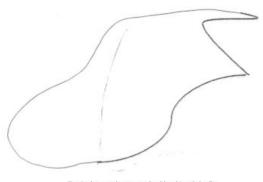
Student Name	Overall Creatvity	Originality	Incorporation	Elaboration
score range	0-10	0-1-2	0-1-2	0-1-2
Bart Simpson	6	2	1	1
Greg Brady	4	1	2	0
Marcie Van Houten	2	0	1	1
Sally Brown	8	2	2	2

Scored examples of scored Completion Creativity Tasks:



"I drew a road and the other half of a road and a house."

Overall	Original	Elaboration	Incorporation
5/10	0/2	1/2	1.5/2



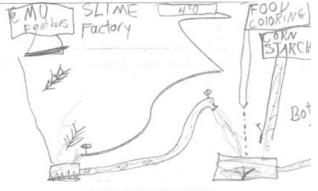
"I tried to make a crooked looking lake."

Overall	Original	Elaboration	Incorporation
3/10	0/2	0/2	1/2



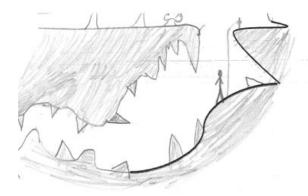
"I drew a ballet-gymnast with a baton with glittery strings hanging off the stick. She is dancing around waving it in the circus. "

Incorporation	Elaboration	Original	Overall
2/2	2/2	2/2	9/10
	2/2	2/2	9/10



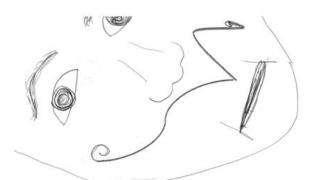
"I drew a slime making machine."

Overall	Original	Elaboration	Incorporation
7.5/10	2/2	2/2	2/2



"I drew some kind of cave. In the top you can see the entrance. I also drew the stalagmites."

Overall	Original	Elaboration	Incorporation
8.5/10	2/2	2/2	2/2
		1.5	



" This is a drawing of a man's face. The line is a mustache, I added swirls at the end to make it more obvious."

Overall	Original	Elaboration	Incorporation	
7.5/10	2/2	1.5/2	2/2	

How teachers and schools can use the Line Completion Creativity Task results:

Like any student assessment, the results from the Line Completion Creativity can be used formally or informally to provide an enhanced perspective of creativity across your students^{*}. Specifically, the Line Completion Creativity Task provides:

- A richer understanding of the different components of creativity,
- A better understanding of individual students and their potential skills,
- A voice reflecting more of the "whole" student and more tangible evidence of the kinds of skills and abilities you value most as an educator,
- Provides students a chance to express themselves in a structured activity,
- Increase opportunities to show growth in student creativity over time, and
- Provide a common metric and ideology for thinking about creativity across teachers and classrooms in your school community.
- Using these assessments over time may provide a more empirical measure of potential changes in student creativity over time

*Please note that this assessment is not intended for grading purposes or making critical decisions. We welcome feedback and suggestions and hope these resources provide teachers and school with better resources for measuring what they care most deeply about. More info and additional creativity assessment tools are available in the free iBook <u>Measuring Creativity in the Classroom</u>.