



ENTRE**COMPEDU**

## Module 4: Assessment

### Go Deeper 4.1 Assessment and creativity



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# Contents

## Go Deeper 4.1

<b>Assessment and creativity</b> .....	3
Using rubrics .....	5
<i>Activity: Assessing Creativity</i> .....	8



## Assessment and creativity

Before you assess creativity, it is important to have a shared understanding with colleagues and students over what is meant by the term. Ken Robinson defines creativity as 'the process of having original ideas that have value.'<sup>1</sup> In module 1 we discussed that in an entrepreneurial sense value can be social and cultural as well as economic. Being original does not necessarily mean being unique. Five-year-old children can suggest an idea which is original or highly unusual in relation to what you might expect from their age. In his book *Originals*, Adam Grant says that originality is 'introducing and advancing an idea that's relatively unusual within a particular domain, and that has potential to improve it.'<sup>2</sup> Of course, nothing is completely original, because all ideas are shaped by prior knowledge and the world around us. Psychologists even use a term ('Kleptomnesia') to describe when we accidentally remember the ideas of others as our own.

One of the most influential academic papers in recent years has highlighted that although American students' general intelligence (IQ) is increasing, creative thinking is in decline for students of all ages. Ken Robinson argues that schools are 'killing' creativity.<sup>3</sup> And yet being entrepreneurial (and original) is about what economist Joseph Schumpeter calls an act of creative disruption. But it might be easier to prefer conformity and students who follow the conventional path. Interestingly, studies of child prodigies (e.g. who can speak six languages by the age of eight or play Mozart at four) rarely go on to change the world. While they win many admirers for their precocious talent, commitment to practice and retention of phenomenal knowledge, they rarely make anything new. As Grant points out, the most creative children are the least likely to be the teacher's pet.

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1 See his talk on 'What is Creativity?' at: <https://www.youtube.com/watch?v=X1c3M6upOXA>

2 Grant, A. (2016) *Originals*, London: WH Allen, p.3.

3 See his blog 'Are Schools Killing Creativity?' at: <https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2018/04/do-schools-kill-creativity>



While the importance of fostering creativity in school is widely recognised in policy documents, this can be lip service in practice. This is partly due to the emphasis on teaching to tests and limited time for creativity within the curriculum. But it may also reflect our attitudes towards creativity, which can be mistakenly seen as the reserve of the arts or an elite group, rather than applicable to all subjects, students, and ages.

Interest in assessing creativity has been expressed over many years. One of the leading figures in the field was American psychologist Paul Torrance, whose tests continue to be widely used. These include:

Verbal tasks e.g.

- ask and guess task in which individuals are provided with a picture and asked to create questions which could not be answered by simply looking at the picture. They are then asked to make guesses as to the causes and consequences of events depicted in the picture
- Product improvement task in which children are given common toys and asked to think of as many improvements as they can which would make the toy 'more fun to play with'. They are then asked to think of unusual uses of these toys other than 'something to play with'.

Non-verbal tasks e.g.

- Picture construction task in which children are given a particular shape (e.g. a triangle) and a sheet of white paper. They are asked to think of a picture in which the given shape is an integral part.
- Incomplete figure task in which a sheet of white paper (covering an area of fifty-four square inches) is divided into ten squares, each containing a



different stimulus figure. The subjects are asked to sketch some novel objects or design by adding as many lines as they can to the ten figures.

The latter is a variation of an older Line Completion task<sup>4</sup>, where students are asked to 'create the most creative picture you can' and 'describe what they drew in 2-3 sentences' within 6 minutes. The students are assessed for their overall originality and how well they incorporate the line into their drawing and text and the degree of details they include (elaboration). Such assessment tasks can be used over time to provide an indicator of students' creativity.

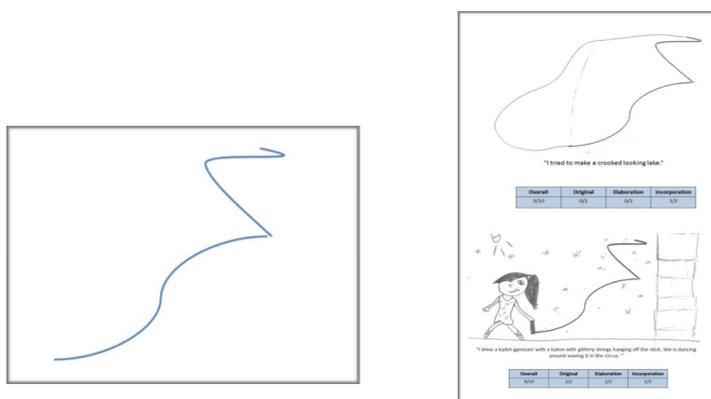


Figure 4.1.1-4.1.2 Creativity test using a squiggly line

## Using rubrics

Rubrics can also support teachers in assessing students' creativity provided that they are not used as a one-off tick list. Rather, they should be shared with students

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<sup>4</sup> Devised by Kate Franck and used by Barron (1958)

to inform their understanding of creativity as an ongoing continuum in which they can identify where they are now and future goals. Table 4.1.1 is an example produced by Brookhart, who stresses that generating a grade is not its purpose. Rather, such a rubric can be shared with students so that criteria are explicit, and students understand them.

Element of creativity	Very Creative	Creative	Ordinary/Routine	Imitative
Variety of ideas and contexts	Ideas represent a startling variety of important concepts from different contexts or disciplines.	Ideas represent important concepts from different contexts or disciplines.	Ideas represent important concepts from the same or similar contexts or disciplines.	Ideas do not represent important concepts.
Variety of sources	Created product draws on a wide variety of sources, including different texts, media, resource persons, or personal experiences.	Created product draws on a variety of sources, including different texts, media, resource persons, or personal experiences.	Created product draws on a limited set of sources and media.	Created product draws on only one source or on sources that are not trustworthy or appropriate.



Combining ideas	Ideas are combined in original and surprising ways to solve a problem, address an issue, or make something new.	Ideas are combined in original ways to solve a problem, address an issue, or make something new.	Ideas are combined in ways that are derived from the thinking of others (for example, of the authors in sources consulted).	Ideas are copied or restated from the sources consulted.
Communicating something new	Created product is interesting, new, or helpful, making an original contribution that includes identifying a previously unknown problem, issue, or purpose.	Created product is interesting, new, or helpful, making an original contribution for its intended purpose (for example, solving a problem or addressing an issue).	Created product serves its intended purpose (for example, solving a problem or addressing an issue).	Created product does not serve its intended purpose (for example, solving a problem or addressing an issue).

Source: From *How to Create and Use Rubrics for Formative Assessment and Grading* (p. 54), by Susan M. Brookhart, 2013, Alexandria, VA: ASCD. Copyright 2013 by ASCD. Adapted with permission.

*Table 4.1.1. Rubric for evaluating creativity.*



One of the challenges for educators in assessing the creativity element of entrepreneurial learning, is that this does not sit comfortably within a behaviourist paradigm that values progress against predetermined learning objectives. Simply put, it is not easy within the education that values measurable results – usually knowledge based – that most of us work in.

If students generate ideas that are out-of-line with pre-established procedures and norms, the ideas can be easily side-lined. When such students challenge the 'wisdom' of educators this can come across as threatening. The educator's default position in assessment can be to revert to the learning objectives. And yet some of the most important advances in fields such as science and technology have occurred because people swam 'against the tide'. Design students are actively encouraged to question their assignment briefs, 'so that they can redefine the limits of the box within which they are expected to respond'.<sup>5</sup>

### Activity

#### Assessing Creativity

Think about how you could make use of these ideas in your own assessment...

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<sup>5</sup> Penaluna, A., Coates, J. and Penaluna, K. (2010) 'Creativity-based ... discussion and case study analysis', *Education + Training*, Vol. 52, No. 8/9, pp. 660-678.

