



Aid to Reflection on Creativity in Teaching and Learning

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Explanation

This tool was produced by the Higher Education Academy's Imaginative Curriculum Project. It contains some prompts to help teachers reflect on the types of creative capacities that they are seeking to develop in their students in different disciplinary and programme contexts and the ways in which they are seeking to develop them. The prompts are based on discussions with higher education teachers, personal accounts of teaching aimed at promoting students' creativity, and research literature on creativity. The tool is therefore provisional. It incorporates the products of earlier discussions but also seeks new ideas and ways of thinking. The tool is a working document and we welcome feedback on its use and suggestions for improvement.

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POSSIBLE REASONS FOR TAKING CREATIVITY SERIOUSLY IN HIGHER EDUCATION

1. Being creative is a fundamentally human characteristic. People generally feel more fulfilled if they are able to be creative. If education is about helping people to develop their full potential then helping students to understand and develop their unique creativities is a worthwhile educational goal.
2. Creativity is integral to being a historian, biologist, lawyer, engineer or teacher in any other disciplinary field of endeavour. But being creative means different things in these different contexts.
3. We need to harness our imaginations and creativity to work with, adapt to and exploit the complexity and change that is all around us in whatever context we work.

Q1 Do any of these reasons resonate with you?

Q2 Are there other reasons?

CREATIVITY – WHAT IS IT?

We are all limited by our imaginations but some people are able to think freshly about something and in so doing open up new possibilities for themselves and others. Imagination (bringing new mental images into existence) and creativity (the ability to create) are inextricably linked. Creativity involves first imagining and then working with the ideas to produce new things. It could be new knowledge, a new process, a product or performance or any combination of these things. We can encourage our imaginations to think many ideas or counteract the habits that limit us to working with a few ideas.

We find it hard to articulate what we mean by being creative.

SOME GENERIC NOTIONS OF CREATIVITY

Q3 Which of these ideas do you associate with creativity in any context?

Q4 What other ideas do you associate with creativity?

- originality and individuality
- being imaginative, generating new ideas, thinking out of the boxes we normally inhabit, looking beyond the obvious, seeing the world in different ways, producing new things
- doing things no one has done before
- doing things that have been done before but differently, experimenting and taking risks.

CREATIVITY IN DISCIPLINES

But for creativity to be useful and meaningful to us as a concept in higher education we need to contextualize the idea through a question like –

Q5 What does it mean to be creative in your discipline or particular programme of study?

Q6 What sorts of things do people do when they are being creative as practitioners?

SOME CHARACTERISTICS ASSOCIATED WITH CREATIVITY IN STUDENTS' LEARNING

Q7 Which of the following characteristics/qualities are you seeking to develop in your programmes/disciplinary contexts?

Q8 Are there other creative characteristics/qualities you are seeking to develop?

Thinking – creativity is likely to flourish where the curriculum encourages the student to engage in divergent as well as convergent thinking, where lateral thinking is clearly promoted, where students can operate in situations of complexity and ambiguity and where students are allowed, and even encouraged, to take risks in ‘safe’ contexts that allow for failure and enable them to cope with it and learn from it. This brings in the emotional (affective domain) of feeling.

Ideas – are an important feature of creativity and the curriculum should encourage students to **generate their own ideas** through their thinking and interactions with others, to reflect on those ideas, and to **review and evaluate them** in the light of the problems and contexts being considered.

Imagination and originality – are purported to be demonstrated through the development of new knowledge, the development of new designs, products or practice(s), the making of new connections between existing knowledge, the transfer and application of learning into new contexts or through student engagement in the systematic processes of enquiry or research.

Resourcefulness – these things don’t happen by themselves. There is a discipline involved in creativity that requires hard work to secure the necessary resources to engage with problems or new situations. Thinking and actions that result in environmental structuring to secure the necessary resources for creativity is an important dimension of creative engagement.

CURRICULUM ACTIVITIES THAT ENCOURAGE THESE CHARACTERISTICS

Student activities that would suggest that a curriculum is addressing creativity would include:

- open ended problem solving or question led enquiry
- use of creative thinking techniques that promote divergent as well as convergent thinking
- projects and assignments that involve planning, design and development work
- personal and interpersonal development perhaps involving collaborative teamwork, personal development planning, reflective portfolios
- development and application of the skills of analysis, review, synthesis and evaluation
- development of capacities for thinking conceptually and visually
- negotiated and experiential learning
- negotiated, self and peer assessment
- assessment that does not seek single answers to single solutions to problems
- assessment that recognises students’ own claims to creativity.

Q7 How does your curriculum support these activities and capacity building?

Q8 What types of activity are particularly important in your disciplinary field?

Teaching for creativity

The concept of teaching is critical to any consideration of the promotion of students' creativity. Negative views of the idea that creativity can be taught are based on transmission models of teaching where teachers' attempt to transfer their own knowledge and sense making to students through lecture dominated teaching, where students' engagements in learning are predominantly based on information transfer, and are heavily prescribed and controlled by the teacher, and where summative assessment drives the learning process. Such conditions are less likely to foster students' creativity than models of the teacher as a stimulator, facilitator, resource provider, guide or coach, and where students are given the space and freedom to make decisions about their own learning process and outcomes. The characteristics of teaching that is more likely to promote students' creativity, as recognised in the personal accounts, are given below.

Characteristics of teaching to promote students' creativity derived from mainly from the principal question in the *Personal Accounts of Teaching*

Q9 To what extent do you endorse these statements?

Teachers need to

strong moderate weak

Demonstrate solidarity			
1. give students permission to be creative			
2. be practising/demonstrating creativity themselves			
3. be prepared to reveal something of themselves in the teaching process			
4. take risks			
5. be open minded in responding to the students			
6. recognise the students' group as a creative resource			
7. be open to possibilities			
Provide activities and resources			
8. provide safe spaces where students' ideas and experience will not be devalued			
9. provide time for students to be creative			
10. provide situations for learning where there are no right answers			
11. provide real-world learning situations			
12. provide activities that are meaningful to participants			
13. provide problem based approaches to learning			
14. provide opportunities for collaborative working and student interaction			
15. provide appropriate structures and tools			
16. provide learning situations that are both fun and challenging			
17. provide students with a creative challenge			
Encourage			
18. act as guides and facilitators			
19. be emotionally intelligent in order to pick up cues and head off difficulties			

20. develop students' self-confidence to work in unpredictable situations			
21. give students the confidence to take risks			
22. promote the development of reflective learning			
23. encourage, motivate and reward a questioning approach to learning			
24. encourage independent thinking			
25. reward creativity			
26. be highly responsive to students as a group and as individuals			
27. provide stimulus and encourage students to find their own examples and direction.			
28. encourage the adoption of a playful attitude			
Understand the context for creativity			
29. understand the ways the unconscious mind and the conscious mind work			
30. appreciate models of creative practice			
31. be sensitive to the balance between challenge and reinforcement			
32. be sensitive to the balance between freedom and control			
<i>Please add any other principles</i>			

Perspectives on creativity in the teaching/learning context

It may also be helpful to consider these perspectives on what teachers think they are doing when they are trying to enable students to be creative.

Q10 Are any of these perspectives relevant to your teaching and learning contexts?

The list includes teacher and student actions and engagements, outcomes and contexts/conditions. The topics were generated from participants at different events. They have been organised under headings for ease of reading.

Challenge

- ❖ breaking and pushing back the boundaries
- ❖ creative challenge
- ❖ critique
- ❖ problem solving
- ❖ reflection and peer critique
- ❖ tolerating ambiguity
- ❖ working with uncertainty and unpredictability

Design

- ❖ conceptual design
- ❖ creative designs and interpretations of architecture
- ❖ creative planning and organising skills
- ❖ creative programme design
- ❖ creating a colourful interactive spreadsheet
- ❖ designing a programme
- ❖ imaginative responses to a design brief

Newness

- ❖ bringing something into existence
- ❖ inventing new things or ways of doing the same thing
- ❖ recognising the emergence of ideas
- ❖ sense of possibility play and enjoyment

Thinking

- ❖ building coherence from confusion
- ❖ helping people to think non linearly
- ❖ making sense of complexity
- ❖ observing processes in action
- ❖ promoting convergent and divergent thinking
- ❖ thinking conceptually
- ❖ thinking critically and reflectively
- ❖ thinking outside the boxes people normally inhabit

Togetherness

- ❖ bringing different perspectives to bear
- ❖ considering other people's points of view
- ❖ cross-fertilisation within a group
- ❖ disciplinary awareness
- ❖ encouraging multiple solutions to a given problem
- ❖ group work
- ❖ working collaboratively

Voice

- ❖ developing narratives
- ❖ developing artistic capability
- ❖ having a sense of voice and writing
- ❖ producing a film/play
- ❖ self-management
- ❖ using metaphor and imagery
- ❖ writing fiction

Students' responses to teaching for creativity (based on personal accounts of teaching for creativity)

Like any teaching intervention results vary according to group dynamics, and the personalities, capabilities, attitudes and interests of individuals. The diversity of students' responses sometimes makes it difficult to generalize at the group level. Students' responses also vary naturally within the process with the same student responding well and not so well to different parts of a creative process. Some students are more comfortable than others with unconventional ways of thinking and doing. Students often respond well and with enthusiasm to creative challenges investing significant time and energy in the enterprise. Some student groups may begin a process warily or even be resistant to it, but attitudes tend to become more positive as they engage with the challenge.

Some teachers recognize that what they do has a strong influence on the way their students engage: a perspective that emerges from running the same session with different groups of students and doing slightly different things and observing and reflecting on the

consequences of their different actions. Through engagement with creative processes and the idea of creativity some students change their perceptions of creativity as a concept. Perhaps those who do not engage with the idea of creativity do not change? In many of the accounts there is a sense of pleasure as teachers admit to being unsure about how students would respond, then being pleasantly surprised as responses emerge. A significant number of accounts highlight the fun and enjoyment that participants gained through their creative process. What is implicit in these accounts are the sensitive, trusting and responsive teacher-student relationships necessary to facilitate and adapt such engagements with creativity.

Q11 What sorts of student responses have you encountered?

Assessing creativity in students' learning

Work in progress by Professor John Cowan

While many teachers and their students might and do believe that it is possible to help students use their creative abilities to better effect, far fewer think it is possible to assess these capabilities reliably. There are at least two valid reasons for wishing to assess students' creativity:

- to acknowledge the development and exercise of something which we value, as indicated in our aims or the intended learning outcomes for a particular course they are studying
- to make students more aware of their own creative processes by engaging them in observing and recording their creative processes and the making of self-evaluative judgements to stimulate further informed development of their own creative ability.

There are three approaches to evaluating/judging creativity in students' learning:

- by product
- by process
- a combination of these.

Several important problems arise in any attempt to assess creativity:

- The assessor, teacher or student needs to have a clear definition in mind of what it is that they are seeking to assess
- Where more than one assessor is involved, they need to have a shared understanding of the criteria against which they will make judgements
- Yet, by its very nature, creativity may lead to performance and outcomes which have not been predicted when criteria for judgement were drafted
- Assessment, as a judgement, should be founded upon data, which is then set against criteria; obtaining reliable data about the creative process, and even the element of creativity in a product, is a daunting challenge
- Consequently the assessing usually becomes a highly personal and subjective process, reflecting the cultural and personal tastes of the assessor, teacher or student
- In all of this, it is difficult to separate manifestations of creativity from behaviours and thinking that are derived from non-creative processes
- Assessment criteria may conflict with students' own perceptions and beliefs about creativity

- Creativity involves taking risks, yet assessment against explicit criteria reduces risk taking, making it hard for students to work outside or against the criteria even though this might be the most creative thing to do
- Any creative person may have difficulty in assessing their own creativity because in and through performance they develop a strong sense of ownership that inhibits objectivity in self-evaluation
- The more creative a person, the less it may seem to them that they are doing other than following what has become a natural process for them; risk taking, for example, becomes the norm rather than something which is rather exceptional, as we gain confidence from risk-taking which has worked out well for us.

What, then, might acceptable assessment of creativity entail? It should surely be valid and reliable, as in any other form of assessment. It should cope somehow with the dual, and not always complementary, demands of assessing the creativity inherent in the final performance or product, and the creativity through which that outcome is generated. For the former, it needs to resolve the problem of defining and identifying what assessors will be agreed is clear evidence of creativity in the final product. For the latter, it will involve evaluating, recognising and rewarding processes such as the quality of thinking, the initial goal setting, the decision making, the experimentation, the associated growth of knowledge to achieve goals, the adaptation of goals, the iterative refinement or even rebuilding of the intended outcome, the reflections on own learning, and the creativity in the decision making.

Initial thoughts on principles for assessing creativity

- *The assessing needs to be a **shared process** – uniting creative student, teacher(s) and peers*
- *It should begin at a fairly early stage with an attempt to formulate a **shared definition** of creativity – perhaps by working through examples which all can understand*
- *That definition should take cognisance of the role of **risk-taking** in the exercise, and especially in the development, of creative ability*
- *In contrast with traditional assessment elsewhere, assessment of creativity should begin with, and concentrate for a while on, **clarifying what is happening** in the personal process, and how effectively that is happening in the view of creator, peers and teachers*
- *The **criteria** to be used in judging a student's creativity should not be formulated until it is clear what features of the process and product are emerging as creative*
- ***Self-evaluation** should figure throughout, with the self-evaluation linking criteria and performance, and open to peer and teacher scrutiny in the form of audit, rather than second marking.*

Q12 How do you assess students' creativity in your programme/modules?

Q13 What creative capacities are you trying to assess?

Q14 What methods and criteria do you use?

Q15 To what extent does assessment practice recognize these emergent principles?