

Nurturing Creative Learners

A Practice Guide

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Introduction and Institutional Context

At Teesside we seek to empower our students to deliver impact on a global scale through Future Facing Learning experiences that provide them with the knowledge, skills, and tools to achieve sustainable success in the workplaces of the future. Teesside University's commitment to developing innovative learning and teaching is evidenced within many themes of its [Academic Enhancement Framework \(AEF\)](#). The AEF provides the structure through which Future Facing Learning is embedded within academic practice and aligned with other strategic priorities to ensure our students are developing the skills, knowledge, and 'knowhow' to thrive in increasingly complex and uncertain futures. Integral to this knowhow is the capacity to think and work creatively; to generate and connect new ideas and working frameworks; and to apply judgement as to the worth of potential solutions to real-life problems and scenarios.

Creativity is not a new concept in higher education. Nor is it something to be bolted on to curriculum practices. Creativity is core to realising authentic future facing learning and the context for many of the wider capabilities and complex learning we seek to develop through our courses and modules.

It is how, through the curriculum, we empower our students and graduates to develop the self-awareness and wide-ranging qualities, abilities, and behaviours to prepare for the future and sustain rewarding professional lives.

While different disciplines in higher education may recognise and value different forms of creativity, the ability to think and work creatively is widely recognised as a catalyst for innovation, adaption, and resilience in modern professional contexts. It is for us as educators to decide the role creativity plays within our courses and modules in preparing our students for increasingly uncertain future professional lives. But how do we do this? What kinds of pedagogic practices and environments are best suited to nurturing creative learners? This guide provides the means to engage meaningfully with such questions, providing actionable insight into the ways academic colleagues might embed and nurture creativity through curriculum and learning design.

Overview of Literature: Why Creativity?

“Creativity has been regarded as one of the crucial skills in the toolkit of the 21st century learner and indeed to effective learning in higher education and beyond”.

Egen et al. (2017, p. 21)

In a technologically rich and constantly evolving knowledge economy, a sense emerges that knowledge cannot, by itself, provide the core of an authentically future-facing higher education. Concerns about whether the current emphasis on skills and outcomes is capable of developing the full potential of students to engage with a complex and rapidly changing world has heralded a ‘creative turn’ (Harris, 2014) in HE, as the role of creative, agile and resilient graduates is acknowledged across institutions, disciplines and professional bodies (Gibson, 2010).

In higher education settings, creativity has spread beyond its original context of arts-based subjects and is perhaps most often used to refer to a generalised ability to generate new concepts and artefacts. Such ‘product-oriented’ conceptualisations of creativity tend to bias breakthrough thinking and cutting-edge practice and are based on the assumption that creativity should be defined as the production of original work that has value – it satisfies a certain need or aim (Egen, et al., 2017). In contrast, ‘process-oriented’ conceptualisations of creativity introduce a range of perspectives beyond the contribution of a singular individual to focus on mental processes and strategies and the potential of creativity to generate new ideas and solutions to complex problems (McWilliams, 2009).

From a process-orientation, creativity is not the result of one person or even a set of people, but of intersecting and interacting relationships between them and others. In order to stimulate a productive creative process, it is not enough to simply engage the individual; individual creativity will only thrive when people are part of a larger creative ‘system’, through which different ideas, attitudes and perspectives can come together in new and interesting ways (Jackson, 2016; Jahnke, 2011). In the context of HE, the curriculum is such a system. The challenge is to redefine this system to establish practice patterns and boundaries within which creative learning can be nurtured (Lin, 2011).

When considered at a practice level, creativity can be engaged intentionally and systematically as fundamental to the ‘process’ of learning, as well as ‘product’ of it. It is our role as educators to engineer the curriculum as a system for nurturing creative learning by enabling meaningful connections across boundaries to encourage learners to actively engage with new and unfamiliar ideas and viewpoints and to collaborate in their mutual development (Belluigi, 2013).

Experience strengthens, extends, and refines the capacity for creative learning by way of reinforcing or challenging learners’ expectations about how things are supposed to be (Jackson, 2014). To seek to develop creative learning is to seek a

greater sense of authorship and authenticity in day-to-day working practices that, in turn, shifts focus from knowledge and 'knowing' (existing understandings of the world), on to a sense of 'coming-to-know' and 'becoming' – characterised by a willingness to engage, to have a go, and learn; a preparedness to listen, explore and an openness to new experiences and perspectives; and a determination to keep improving and moving forwards.

Solomonides, Reid and Petocz (2012) highlight a student's developing 'sense of being' as a cornerstone of creativity as it mediates the ways in which students engage with various aspects of their learning, from the practical, to the development of their emerging personal and professional identities. A consideration of this 'relational domain' in creative engagement should include not only the environment in which learning occurs, but also the modelling of a 'tolerance for uncertainty' where the educator can develop the student's capacity for working productively within uncertain conditions (Orr and Shreeve, 2018). From a pedagogical perspective, this is about recognising the discomfort that can arise in the face of uncertainty and supporting students to develop the disposition, the ability, and the strategies to deal with the unknown and the ambiguous—and in doing so, learn how to persevere and navigate their way through it in productive and meaningful ways.

From this perspective, the function of a future-facing higher education is reconceptualized as the building of human capital, supporting the development of each individual learner's creative capabilities to seek out and face everyday problems, as well as enhance their capacities for future success.

We must provide a clear reference point for creativity in our learning designs, allowing sufficient space for innovation, for appropriate risk taking, and for experimentation. We must also find ways of valuing the role of 'relative failure' as an integral part of the creative learning process, since initial mistakes will eventually allow for improved outcomes. The acceptance of failure and experimentation, as much as the reward for success plays a key part in developing individual resilience and offers an incentive for innovation.

It should be noted here that there is no such thing as a 'creative strategy' or a 'creative environment' that we as educators should generally use, because 'what works' depends on the types of thinking and learning we want to encourage at any particular moment in the student learning journey. It is also heavily dependent on the learner and their progress. In short, there are no guarantees. Creativity can be supported and nurtured, as well as weakened and suffocated by the climate for learning we create through our curricula and learning designs.

6 Attributes of Creating Learners

Nurturing creative and resilient learners requires curriculum and learning designs that move beyond an emphasis on the ‘acquisition’ of knowledge and understanding, to favour more engaged, learner-centered, approaches. Here focus is on the development of certain attributes, their deployment in both familiar and unfamiliar circumstances, and the ability to contextualise and adapt knowledge and skills based on experience and learning.

Enabling creative learning in this way is to intentionally develop a set of attributes that are demonstrated by students through their ability to effectively communicate about themselves and their ideas, be open to feedback and new insights, and confidently put their learning to work in ways that enable them to adapt to and thrive in different situations and scenarios. These attributes are recognised here as:

- **Authenticity:** *evidenced through exploratory and self-reflective behaviour – learners are encouraged to take ownership of initiatives and tasks by actively constructing and making judgements on their own knowledge and understanding of concepts and relationships relevant to real-world contexts.*
- **Curiosity:** *evidenced through inquiring and information seeking behaviour – in response to situations and tasks that require the ability to elicit, analyse, refine and evaluate existing knowledge to create unique and cogent ideas and artefacts.*
- **Receptivity:** *evidenced through inclusive and collaborative behaviour – in response to learning tasks and situations that require an openness to new and different knowledge, ideas and perspectives and the ability to connect and work with others, to communicate ideas, and be responsive to multiple sources of feedback.*
- **Proactivity:** *evidenced through self-initiated and anticipatory behaviour – in response to scenarios and tasks that require a capacity to take measured risks, an ability to perceive and create development opportunities and the resourcefulness to pursue novel perspectives on and solutions to problems.*
- **Personal Flexibility:** *evidenced through accountable and evaluative behaviour – in response to unpredictable situations that require the self-awareness and confidence to embrace and navigate change and the capacity to put learning to work in a variety of ways and settings.*
- **Resilience:** *evidenced through self-regulated and adaptive behaviour – in response to overcoming obstacles and dealing with uncertain situations and outcomes, requiring a tolerance for ambiguity, a positive motivational outlook, and a proclivity for solving relatively complex problems.*

It is important to acknowledge that different disciplines will recognise and value different forms and combinations of these attributes; context of practice is, therefore, vital to the interpretation and meaning of creative learning in curriculum and learning design.

These 6 attributes, together with Teesside University's [Academic Enhancement Framework \(AEF\)](#), provide a clear structure and language for supporting future facing curriculum design that acknowledges and nurtures creative learning. By providing descriptors that join creativity with student learning development this expanded framework allows us to benchmark for a wide variety of curriculum outcomes and practices. It also provides the means with which to evaluate and articulate what we do well currently through surfacing good practice and sets out an aspirational terrain to help us to further improve.

From the perspective of your own course or module, some useful first questions when reviewing the extent these attributes are actively embedded in your current curriculum and learning designs include:

CONTEXT – In what ways does your course or module currently expound these attributes to help students develop flexible and creative ways of thinking and working that empower and prepare them for their future?

- Consider how these attributes are delivered across levels on your course and the extent to which this builds developmentally as students progress.

CONNECTIVITY – How does your course or module support students to actively engage in multiple (self, peer, tutor, industry) dialogues and networks, and to critique, shape, and position authentic narratives about their own creativity and learning development?

- Consider how these attributes are developed through interaction and collaboration with other people and networks that enable students to make meaningful contributions to a wider community of practice.

CHALLENGE – In what ways does your course or module intentionally develop these attributes to help students work through and resolve complex problems and situations as part of the process of learning?

- Consider how learning and teaching activities on your course or module develop these attributes to enable students to confidently navigate changing professional industry contexts and respond positively in challenging scenarios.

Creativity in Student Learning

Creativity in learning is characterised by two interconnected abilities: creative thinking and creative performance (Lin, 2011). Creative thinking involves the capacity to generate and connect ideas and create frameworks to judge the worth of ideas and potential solutions. Many academics would see these as the higher-order academic skills and capabilities that they seek to develop in their disciplines. Creative performance requires a positive motivational outlook and personal commitment, evidenced by perseverance and willingness to take calculated risks, experiment and make things happen (Belluigi, 2013).

There are certain conditions that are generally recognised as facilitating students' creativity in educational settings, these include:

- **Students need sufficient time and space in the curriculum to allow them to develop their creativity.** Providing incremental opportunities for students to develop confidence in their ability to explore and experiment, to take risks in 'safe' environments and to initiate work in different situations.
- **Activities and working situations should be sufficiently varied and diverse to enable all students to be creative in ways appropriate to their own experience and learning situations.** Providing opportunities for students to practise and apply their learning in a variety of ways and scenarios caters for a range of learning needs, motivations, and preferences.
- **Students are given the autonomy to choose to work in new and interesting ways.** Supporting students to manage their own learning strategies by providing flexibility and choice in the kinds of work they engage with and produce and encouraging and valuing their efforts to be creative.
- **Students are challenged through authentic, demanding, and meaningful work.** Encouraging students to embrace unfamiliar tasks and working practices, be open to new ideas and perspectives, and recognise opportunities to create new and build on existing knowledge and insight in real-world learning situations.
- **Assessment is intentionally designed to allow for outcomes which are not narrowly predetermined or fixed.** Narrow, summatively driven assessment practices and criteria that focus on capturing what is known and which do not recognise the process of learning or emergent unanticipated learning outcomes can inhibit creativity. Flexible and integrated assessment design that emphasises assessment of 'process' (i.e. multi-phased tasks, e-portfolios) enables students to draw together and apply their learning throughout a module or course and provide important opportunities for students to demonstrate their creativity.

— **Fostering a learning environment that encourages active engagement, reflection and personal development for both students and staff.**

Supporting students to collaborate with others, create and engage with networks, communicate their ideas, showcase their abilities and make the cognitive, relational and cultural connections that will help to develop their ability to actively engage with communities of practice.

Models of teaching that rely on lecture-dominated delivery, where student engagement in learning is predominantly based on the transfer of content, prescribed and controlled by the tutor and where summative assessment is the central driver of learning processes are less likely to foster and sustain students' creativity.

Teaching for Creative Learning

To facilitate the nurturing of creativity in higher education, it is necessary to promote a culture that gives greater value to creativity and its expression, not being restricted to traditional forms of academic development.

Alencar et al. (2017, p. 557)

To sustain future facing learning and teaching that conveys the conditions for creative learning requires a pedagogic outlook that is facilitative, enabling, proactive, open to the possibilities of collaboration and experimentation, and that values the processes as well as the products of student learning. This, in turn, requires adopting holistic (course-wide) strategies wherein the 'process of learning' is as important as the results of learning. Educating for an uncertain and changeable world needs curricula that reflect its qualities. This means pushing beyond tightly bound curriculum outcomes and scripted instruction to learning designs that maintain an open attitude towards creative ideas and behaviours, sharing and collaboration, flexibility and choice, and value independent thinking and working.

Principles for Fostering Creative Learning

When designing or redesigning learning, teaching and assessment activities to more favourably nurture students' abilities to think and work creatively, the following framing principles for effective learning design are helpful for teachers in developing their own capacity to encourage students to learn more creatively across different modes of delivery (whether online, blended or face-to-face):


- **Setting (and mapping) the scene:** Most courses will contain within them opportunities for students to work in creative ways. Making these opportunities explicit and understanding the nature of the creative process(es) and the role(s) they play at course and module level is a necessary first step in designing for creative student learning.
- **Engaging Learning Communities:** A curriculum that supports creativity in students' learning provides opportunities for sharing understandings of the different meanings of creativity in particular learning contexts and situations through intentional dialogue(s) and active student involvement within disciplinary communities of practice.
- **A focus on personal development:** A well-designed curriculum will prepare students for learning creatively, equip them with a range of practical and reflexive tools, and encourage them to use and adapt these tools in ways that align with their own goals, motivations and decision-making processes. Supporting the development of students' self-awareness and capacity for reflection enables them to recognise their own learning as it emerges and to make claims of understanding and achievement at different points in their learning development.
- **Flexible Learning:** Courses need to be built around an openness to and intentionally scaffold for learner choice and agency; utilizing flexible and adaptable approaches that facilitate students' decision-making by introducing key perspectives (theoretical frameworks) and tools (concepts, strategies and information sources) and supporting students in practising them on problems and situations that they themselves choose/identify.
- **Enterprise and Originality:** Students' creative learning is most effectively facilitated through learning tasks and processes that promote and develop their ability to confidently and effectively move between a generative (developing new ideas, topics and associations) and an analytical (focused, structured and evaluative) way of thinking. This is achieved through designs that require students to consider or seek out new concepts and fresh perspectives or draw from their own learning in several modules and/or tasks, whilst encouraging them to judge for themselves appropriate response(s).
- **Crossing Boundaries:** Being able to use knowledge, skill and behaviours developed in one context and apply these in another context is an important ingredient for developing creative learning. Learning design that encourages such behaviour is achieved in situations and tasks that are experienced as authentic and novel to learners but are achievable (realistic) using the skills and behaviours students are developing.
- **Learning-Focused Assessment:** Assessment strategies that privilege atomized, heavily summative approaches to assessing learning at module

and course level can inhibit designs for creative learning, which may need to foster student learning development over a longer period of time and in a broader range of contexts before capabilities can be assessed. Strategies that require and enable students to draw together and apply their learning throughout a course and/or module (such as integrative or synoptic assessments) provide important opportunities for students to demonstrate their creativity and reveal their understanding of how they have acquired key learning outcomes from a course (in the form of reflective accounts or culminative portfolios).


Learning processes crafted to foster creativity need to develop self-efficacy, encourage risk-taking in safe environments where learners are encouraged to engage with messy and unpredictable situations in which there are several plausible outcomes. It is our role as educators to devise pedagogic strategies that create a context for problem-focused learning, for learner agency and engagement and where learners' creative contributions are appreciated and valued.

7 Practice Examples


Engaging Students in Creative Learning




Brown, Jafferani & Pattherwala (2019)
Using drawing, model making and metaphorical representation to increase student engagement with reflections.




Harwood and Liu (2019)
Practising creativity to develop postgraduate marketing students' 'Client-based' Experiential Learning'




Satchwell (2019)
Creative Energy: Engaging students in a participatory story-making research project with disadvantaged youth people.




Jones & Jones (2019)
Do something different: navigating the writing process during a time of stress.




Leigh-Patrickson (2019)
Creative Energy: Engaging students in a participatory story-making research project with disadvantaged youth people.




Clare-Hunter and O'Brien (2019)
Seeing and Sticking, Being and Becoming: the Kaleidoscopic impact of a creative intervention.



Lubicz-Nowrocka (2019)
Creativity and collaboration: An exploration of empathy, inclusion and resilience in co-creation of the curriculum.



To access these and more articles on developing creativity in student learning see the special 'Creativity' issue of the [Student Engagement in Higher Education Journal](#)



Reviewing Practice

The following prompts should be used in conjunction with the **6 Attributes of Creative Learners** (p.5 of this guide) and **Principles for Fostering Creative Learning** (p. 8 of this guide). Each question is designed to support reflection and inform action. Responses to and dialogue around these questions can provide a useful source of data from which to evidence or benchmark current practice, progress, and impact, or to inform planning and/or decision making for future curriculum developments.

- 1) To what extent are you providing regular opportunities for students to develop confidence in their ability to explore and experiment with new ideas, perspectives, and practices in their learning?
- 2) To what extent are you taking steps to provide students with 'safe' environments in which to take risks and to initiate work in different situations and settings?
- 3) To what extent are you providing opportunities for students to focus on, practise, and apply their learning in creative ways that reflect and respond to their changing learning needs, motivations, and preferences?
- 4) To what extent are you providing flexibility and choice in the kinds of approaches and work students can engage with and produce throughout your module or course?
- 5) To what extent does your course/module provide students with opportunities to create new and build on existing knowledge and insight in real-world learning situations?
- 6) To what extent does your course/module require students to put forward and showcase their own ideas about and solutions to problems they themselves have researched and defined?
- 7) To what extent does your course/module provide opportunities for students to demonstrate their creativity through assessment of 'process', supporting students to draw together and apply their learning throughout a module or course in meaningful ways?
- 8) To what extent is your course/module providing students a variety of opportunities for meaningful and productive collaboration with others (tutors, peers, industry) as part of disciplinary networks and communities of practice?
- 9) To what extent are you modelling for students a 'respect for others' and a 'preparedness to listen' when requiring them to interact and collaborate with ours?

Sources of Information and References

Books and Collections:

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Networks:

The Creative Academic Network: a global network of people interested in creativity and committed to enabling students' creative development:

<https://www.creativeacademic.uk/>

Creativity for Learning in HE (or short #creativeHE community): a community for supporting, sharing and developing novel learning and teaching ideas:

<https://creativehecommunity.wordpress.com/>

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