Credne 2.3 Fostering Creativity: Risk-taking and learning to fail

Being creative typically involves an element of risk-taking – and a consequent likelihood of failure. But risk-taking is multidimensional, and not all categories of risky behaviour are linked to creativity.

What is it?

The short version: creating a teaching and learning environment that facilitates intellectual risk-taking, and that does not automatically penalise failure, is a very good way to foster creativity.

Creativity typically involves a degree of risk. Great innovators in arts and literature take risks when they experiment with radical new forms: the public might not understand the work; they might *hate* it. Most long-established writers or musicians have at least one experimental book or album, generally deemed to be a "failure", in their back catalogue. And designers, scientists and creative people in every other field take a risk whenever they try to do something innovative. It might not be understood, but even more likely it might just not *work*.

Putting yourself outside the comfortable security of your own established skillset is itself a risky undertaking, but it is essential to any kind of personal development. Pablo Picasso – a creative individual if ever there was one – famously said, **"I am always doing that which I cannot do, in order that I may learn how to do it."**

Placing constraints on a process can help to foster creativity – but not all constraints are created equal, and one that certainly doesn't have a positive impact is **risk-avoidance** due to **fear of failure**. This is particularly pervasive in formal education systems with their persistent "pass or fail" binary – which tends to be bad for creativity. **So, encouraging risk-taking and discouraging fear of failure is key to developing creativity in your own practice and amongst those you teach.**

Which type of risk-taking?

It is very important, however, to understand that risk-taking comes in different flavours, and that **not all types of risk-taking are linked to creativity**. Someone who drives at high speeds and refuses to wear a seatbelt isn't creative; they're just reckless; likewise, someone who regularly makes wildly incautious financial decisions. There is actually solid research evidence that those kinds of risky behaviour have absolutely no connection to creativity. A 2017 study by Tyagi et al looked at **five distinct types of risk-taking**: financial, health and safety, recreational, ethical and social. The researchers found that of the five, **only social risk-taking was a clear predictor of creativity.**

Linked to social risk-taking is **intellectual risk-taking** – a concept so commonly discussed in creativity studies that it gets an acronym (**IRT**, obviously). The scholar Ronald A. Beghetto calls it **"a special class of risk taking"** and defines it as:

> [E]ngaging in adaptive learning behaviors (sharing tentative ideas, asking questions, attempting to do and learn new things) that place the learner at risk of making mistakes or appearing less competent than others (2007)

Again, there's solid evidence of the link between intellectual risk-taking and creativity. When Beghetto, Karwowski and Reiter-Palmon (2020) investigated the connections between **creative confidence** (basically, believing yourself to be a creative person), **intellectual risk-taking and creativity**, they found that on its own, creative confidence was actually a poor predictor of creative behaviour. The vital ingredient was IRT. The willingness to take intellectual risks, rather than self-belief alone, is what makes the difference when it comes to being creative (though that willingness might itself stem from self-belief).

This blogpost from *Psychology Today* gives an accessible overview of these studies.

This might sound stupid, but…

Here's a really simple example of what intellectual risk-taking and social risk-taking look like, and how they can be interconnected: when someone in a group situation puts up their hand and says **"Sorry, this is probably a really stupid question…"**, we all know that what follows is actually very seldom a stupid question; quite the opposite in fact. But the person asking the question has taken a social risk – the risk of looking stupid or pernickety or over-eager in front of the group. And that social risk-taking was prompted by intellectual risk-taking – thinking critically and asking questions about the information being presented.

Fostering risk-taking among students
Fear of failure and a tendency to risk-avoidance are amongst the most significant **barriers to fostering creativity in higher education**. And they also have something to do with the scepticism about creativity that sometimes arises outside of what are traditionally seen as "creative disciplines" such as entrepreneurship and the arts.

When the scholars Kazem Kazerounian and Stephany Foley (2007) conducted research on attitudes towards creativity in the University of Connecticut's School of Engineering, they encountered such comments as "Musicians, artists, and poets do not build automobiles, bridges, and cell phones" and "Engineers cannot take risks" (2007, p.762). But clearly, without intellectual risk-taking, there would never have been any innovation in engineering.

So the first step to fostering creativity by way of encouraging risk-taking is to recognise that **risk-taking and recklessness are not synonymous**. The intellectual risk-taking required for creativity is typically **informed and calculated**. It's certainly not *mindless* risk-taking, as the name makes clear – *intellectual* risk-taking.

Kazerounian and Foley go on to offer **"Ten Maxims of Creativity in Education".** Maxim 2 is **"Ambiguity is good"** – a tolerance of the uncomfortable gap between original question and final answer. This is the space in which intellectual risk-taking happens. Maxim 6 is the idea of **"learning to fail"**, and Maxim 7 is **encouraging risk** – being constructive in critiques of risky projects and avoiding disincentivising risk in project work. It's worth noting that Kazerounian and Foley report that, of their ten maxims, "ambiguity is good" and "learning to fail" are those that students most often perceive as absent in university teaching – across all disciplines, in the sciences and humanities, as well as in engineering (2007, p.767).

When it comes to further steps that you can take, **it's always worth turning to primary and secondary school teachers for tips** – their pedagogic principles are often wholly transferable to higher education. Here are some blogs with simple suggestions from schoolteachers:

- Lessons for the Learned: Intellectual risk-taking
- Everfi: Encouraging Risk Taking in the Classroom

Three key steps for your teaching…

When it comes to encouraging intellectual risk-taking – and thereby fostering creativity – there are three main areas to consider.

1. Make sure the teaching and learning environment is supportive of risk-taking.

A classroom where asking "stupid questions" is actively encouraged is a classroom full of intellectual risk-taking – and therefore creative potential. We should already be aiming to **make our classrooms safe, non-judgemental spaces**; but remembering just how deeply embedded risk-avoidance and fear of failure are – and then actively working to overcome them – is vital.

Also important is **destigmatising failure** itself. The brilliant Museum of Failure houses an intriguing and frequently hilarious collection of failed products from some of the world's most successful companies. But as museum curator Samuel West explains in this video, many of these failures didn't come about because of positive intellectual risk-taking, but because of hubris, which itself emerged from the stigma around failure: the companies involved did not always want to learn from their mistakes.

Remember, just as *mindless* risk-taking doesn't have any connection to creativity, *mindless failure* isn't much use either: failure need to be tapped for positive lessons through **criticality** and **reflection**.

2. Where possible, rethink your rubrics.

The old pass/fail binary isn't great for encouraging risk-taking; but **rewarding effort** rather than simple successful outcomes is. So, if you're setting a task or assignment in which you want students to demonstrate their creativity, think about how you'll assess it, how you'll arrange your marking rubric.

Let's say it's a presentation-based assignment. Student A does a very conventional – and frankly boring – presentation with technically perfect but dull slides, smooth but unimaginative delivery and all the standard components included. Student B, meanwhile, does something wildly original. They take intellectual and social risks; they're creative – but ultimately their presentation doesn't quite work. **Who should get the higher grade?**

3. Take risks yourself – let students see you making mistakes.

As ever, **if you want students to do something, you need to be willing to do it yourself**. A great way to help them feel comfortable taking intellectual and social risks is to let them see you taking those same risks yourself. The easiest version – the cheat's option, in fact – is simply to share stories of your own failures. You're teaching presentation skills? Tell them about your own catastrophic attempt at an innovative presentation (so long as you frame it as an ultimately positive experience).

But much better than mere storytelling, is actually **modelling risk-taking** live in front of them. Go beyond your own teaching comfort-zone: **try new things in the classroom**, things that you don't feel entirely confident about, techniques or exercises that you've never attempted before. And crucially, let students *know* that you're taking a risk; tell them, "I don't know if this is going to work, but I want to try something here…" And if it doesn't work, that's great; you've modelled not only risk-taking, but also failure**.**

If that sounds scary, it's because it's meant to be – but in a good, creativity-fostering way!