

## Credne 2.5

# Fostering Creativity: The teaching and learning space

**When it comes to fostering creativity, the impact of the physical environment is often overlooked. But there are some simple, practical steps that you can take to make a more creative space.**

### What is it?

**The short answer: considering physical factors that may impact on creativity, and, where possible, modifying your teaching and learning spaces to give students' creativity a boost.**

Maybe you're someone who is equally productive wherever you find yourself working – at the kitchen table, in a noisy campus café, hunched over your laptop on a bus or train, or hunkered down amongst the bags and boxes in the spare bedroom. But chances are, your physical environment will have at least some impact on your productivity. Being able to work in the right room, with the right light and the right décor makes all the difference. And you might also find that you need to get outside – to the garden, the park, the beach, the woods – to have your best and most original thoughts.

What goes for general productivity certainly goes for creativity too. It's unfortunate, then, that formal learning spaces – classrooms and lecture halls – in educational institutions still tend to be, **"often not much more than educational warehouses"**, as the scholars Scott A. Warner and Kerri L. Myers put it ([2010, p.29](#)). Clearly, to fully escape from those warehouses, major investment – not to mention large-scale creative design work – is required. However, there are small things you can do yourself. But before we get to that, a bit of background.

### Four Ps plus?

Mel Rhodes' influential conception of creativity identifies four components, the famous **"Four Ps"** (though it's always crucial to remember that Rhodes argued that all those Four Ps need to be present and united for optimal creativity). This concept is discussed in more detail in **Section 2.2** of the Credne Handbook. The Ps stand for **Person, Process, Product** – which are all self-explanatory – and the slightly more obscure **Press**. For Rhodes, Press meant **"the relationship between human beings and their environment"** ([1961, p.308](#)).

Because "no one could conceive of a person living or operating in a vacuum" (p.305) the idea of the "Creative Press" was, Rhodes said, implicit in any conception of creativity. But despite this early acknowledgement, as [Alberto Montuori](#) notes, there has been a relative dearth of research on "environments that foster creativity" ([2010, p.2](#)). And what discussion there is often tends to focus on the social or cultural aspects of environment, rather than concrete physicality. Some scholars do hone in more directly on the physical environment, however. For example, **Tina Seelig's "Innovation Engine"** conception of creativity divides its components into internal and external, and identifies **"habitat"** as one of the external components (the others being resources and culture).

Clearly the different elements of the **"environmental factor"** – social, cultural, physical, resource-based – are themselves intertwined. **A teaching and learning space beautifully designed to foster creativity won't be particularly helpful if the teaching that goes on there is intolerant of failure and does nothing to foster intellectual risk-taking and divergent thinking.**

Certain cities or regions around the world have reputations as hives of creativity, attracting creative practitioners to live and work – Berlin, and the Burren, to take two radically different examples. Multiple factors contribute to making those places conducive to creativity – not least the existence within them of **communities of creative practice**. But the physical environment surely also plays a part, to a greater or lesser degree: it's probably reasonable to hypothesise that the physical environment is more significant – or at least more prominent amongst the other factors – to fostering the creativity of the artists, writers

and musicians who choose to work in the Burren, than it is for their counterparts in Berlin.

All this serves to make the basic point: **the physical environment does matter for creativity**, and we might well add a Fifth P to Rhodes' Four Ps (perhaps as a subset of the Creative Press). As for whether that P stands for Place, Space or Physical Environment, take your own pick!

## Escaping the “warehouse paradigm”

One thing we do know: the traditional classroom or lecture theatre, with its rows of front-facing desks, deficit of natural light and typically bleak décor **isn't a particularly conducive environment for any kind of learning**, let alone creativity. As Warner and Myers say, “it is tragic that the warehouse paradigm still continues” (2010, p.29).

Things are slowly changing, and new campus developments sometimes produce beautiful teaching and learning spaces. [The Learning Hub at Singapore's Nanyang Technological University](#), for example, has **done away with forward-facing classrooms and sharp corners**.

You're unlikely to be able to create your own version of the Learning Hub overnight. But don't worry, because according to Warner and Myers, “Any classroom environment can be configured to help bring out creativity in students” (2010, p.30). These are some of their suggestions:

### 1. Natural light is good

So if the room has windows, open the blinds! And relatively **low temperatures** are good too, so open the windows!

### 2. Colour and decoration

There is some evidence that colour has an impact, and that **blue walls, in particular may foster divergent thinking** (see [Tina Seelig, 2012](#)). You might not be able to organise a repainting of your classroom, but you could add some simple **decoration and visual stimuli**. Remember, however, that if these are merely decorative, **they will rapidly lose impact**; by the third time students have been in the room, that fading movie poster behind the lecturer's desk will have lost any impact. As Teresa Amabile says, “the physical

environment can provide visual stimulation for creative performance, but only if [students] already know or can be taught how to use cues in the environment effectively” (1996, p.228).

### 3. Space

Those innovative classrooms at Nanyang Technological University are all about **connectiveness and flow**, and you can foster some of that in a traditional **classroom simply by moving desks around**, opening up spaces for movement. Even in a traditional lecture theatre you might be able to move students to the open space at the front for brainstorming and other idea-generating activities.

### 4. Movement is good

Seelig stresses the importance of **space and movement**, bringing an **actual physical dynamism into the process of idea-generation**. This can be as simple as using an **ideas wall** – having students put ideas on post-its and sticking them to a wall as part of brainstorming.

### 5. change is good

If you're hoping for a particular burst of creativity on a given day, making whatever **changes** you can to the space – moving as desk, sticking something new on the wall – can help to foster it. So can moving students somewhere entirely new for the purposes of the activity – taking them outside, for example.

The Centre for Creativity at the University of Pittsburgh [has a “makerspace” called The Workshop](#). It's stocked with everything from art materials to musical instruments, which can be used by any staff and students individually, or booked for classes, “to think through questions or problems by engaging hands and minds in making things”. Again, you might not have access to an actual makerspace, but you could allow for a bit of simple making with basic art materials in any classroom.

We'll finish up with a question from Warner and Myers (who were themselves thinking mainly about teaching environments for secondary school technology students, but their suggestions apply equally to higher education):

Why do we expect our students to be creative in environments that we, as adults, would never tolerate? (2010, p.33)