

Speedy Techniques

Lesson Unplanning

Encouraging creative thinking wherever possible

CATEGORIES: DIVERGENT THINKING, CREATIVE THINKING

Not the terrifying chaos that the name suggests, this simple approach from Ronald A. Beghetto reminds us to build opportunities for creative thinking into our existing teaching. Rather than a specific technique, think of “lesson unplanning” as a maxim to keep in mind when setting tasks or asking questions.

Steps

“Lesson unplanning” – a term coined by Ronald A. Beghetto – rests on the idea that tasks or problems fall into two categories: **routine** and **non-routine**. Routine problems are typically solved through convergent thinking; non-routine ones require divergent thinking – they generate multiple ideas. Beghetto notes that we tend to view fostering student creativity “as an aspirational goal” which we lack “the time and curricular capacity to address”. His practical solution to that lack is simply “to transform routine problems into non-routine ones” wherever possible (2017, p.987). “Lesson unplanning”, Beghetto says, “refers to the process of creating openings in routine exercises by replacing predetermined features with to-be-determined aspects” (p.990).

Here's a very simple example:

“What’s $2 + 4$?” is a routine problem. It is solved convergently with minimal scope for creative thinking. If a student answers, “6”, the response is “Correct!”
If they give any other answer, the response is “Incorrect!”

But what if you flip it around?

“How can you make 6?” has multiple correct answers. If a student replies, “By adding 2 to 4”, the response can be, “Correct – now think of another way of doing it!”

Even if you just stick to simple mathematical solutions there are many “correct” ways for students to answer. But just imagine if you allowed them leeway to find ambiguity in the question itself! What does “6” mean? What does “make” mean? The possibilities would be endless.

In a higher education setting, many of the questions or tasks we present to students are non-routine already. But it is often possible to make them *more* non-routine in the way we phrase or frame them. Even with a problem that really is inflexibly routine, it may still be possible to allow space for creativity by giving students the opportunity to vary *how* they present their (routine) solution.

To be clear, routine problems have their value. But “lesson unplanning” involves trying not to waste any opportunity for presenting students with a non-routine problem – whether in an off-the-cuff question to check comprehension, or in a more complex task or assignment.

Don’t limit your students by asking “What’s 2 + 4?” if you can ask “How can you make 6?” instead...

For more, see: Beghetto, Ronald A. (2017) “Lesson unplanning: toward transforming routine tasks into nonroutine problems” in *ZDM Mathematics Education* 49:987–993. DOI 10.1007/s11858-017-0885-1

ONLINE? THIS WORKS IN ANY CONTEXT.

PHYSICAL RESOURCES? NONE REQUIRED.