



CHAPTER 3:

COME DUNNING WITH ME, KRUGER! HOW DO YOU KNOW IF WHAT YOU ARE SERVING UP IS ANY GOOD?

Rebecca Ferguson, Paul Astles, Mike Collins

Mikezilla and Markzilla emerge from their exploration of transformation, ready for the journey that lies ahead and prepared for how it will change them. They're learning about education. They've been to school, they've been to university. Sitting in lectures for hours on end must surely have given them all they need to know. But standing in their path is another Zilla.

This is Paulzilla. He waves a menu at them frantically. 'No, no,' he says. 'There's more, much more. You've just made the error that so many make. You know a little bit, but you don't know enough to know how little you know.' He opens his menu. 'Let me tell you about the Dunning-Kruger effect.'

This chapter tackles a British institution – the TV series *Come Dine with Me* – and a much-loved psychological concept, the Dunning-Kruger effect. It tells the story of people who don't know where their ability level is for something, and links this with a perennial question for educators: **How do you know whether what you are serving up is any good?**

Come Dine with Me

In the popular TV series *Come Dine with Me*, in order to be judged the perfect dinner party host during a one-week contest, participants take it in turns to cook for and entertain the rest of the group. Their rivals, meanwhile, snoop around the house, make snide remarks about each other's cooking, home and lifestyle, and award each other points. The winner each week is the participant awarded the most points. The host on the final day opens the envelope to read out the results and the winner collects the £1000 prize. Overall, the show is so much more than the sum of its parts. It's wonderful – and not just in the opinion of one of the Zillas. Running on Britain's Channel 4 since 2005, with umpteen snippets available on YouTube, it has been described multiple times as a British institution. It's one of those shows that is cheap to produce but covers all the basic human connections and emotions, making for truly crap, and therefore truly exceptional, British TV. Audiences love seeing people failing spectacularly and being awful to each other.

We have often been perplexed by the show's undefined marking criteria. What is the difference between a 1 and 2, or a 4 and 5? There is no clarity on this point. Meals could just as easily be categorised as 'good', 'bad' or 'indifferent' and the outcome would be the same. (This perplexity can be applied to assessment in general. Why bother giving subjective percentage outcomes

in cases when pass or fail would probably be sufficient? More on this later.)

To date, no one has ever achieved the programme's perfect score of 40 – the nearest was 39 in Liverpool 2006, with three guests awarding a perfect 10 and the fourth marking their host down for serving water in glass bottles. At the other end of the scale, in Wolverhampton 2009, one competitor was awarded just 7 points in total after swearing at his guests, throwing a starter out of the window, and delaying the meal for so long that there was talk of ringing for a takeaway. Again, there are parallels with educational assessment – why offer an apparent range of marks from 0-40, when the actual range is 7-39? In an educational setting, why present a scale that goes up to 100%, if nobody is ever awarded that perfect mark?

The most interesting part – and the best television – is not when a competitor is the perfect host and the perfect cook but rather when some parts of the evening fail spectacularly! One of the most famous moments in the show came at the end of a week when the host on the final day had to announce that his bitter rival had triumphed and accompanied the announcement with a, 'Dear Lord, what a sad little life, Jane. You ruined my night. Completely. So you could have the money. But I hope now you spend it on getting some lessons in grace and decorum, because you have all the grace of a reversing dump truck without any tyres on.'

A recurrent feature of the show is the inability of low-scoring contestants to recognise how badly things are going, paired with an overestimation of their own competence. As time ticks away, with his guests becoming restive, and one dish a complete write-off, the lowest-scoring-ever contestant says, 'I'm still gonna win it, though.' By the end of the evening, when he has sent his guests home clutching the ingredients of the starter that he never found time to make, he says, 'At least ten just for effort, clearly.'

Another contestant, relegated to last place, says before storming out, ‘My food was better than any of yours [...] My presentation was amazing, far better than any of yours.’

And why is it that so many contestants are incapable of assessing their own ability? The answer may lie with the Dunning-Kruger effect (Dunning, 2011 and Dunning, 2017).

The Dunning-Kruger effect

We’re all familiar with the idea that you don’t know what you don’t know. In educational terms, this is known as the Meno Paradox. This was first formulated a couple of thousand years ago, when the Greek philosopher Plato recorded a dialogue between Socrates and Meno. Meno suggested that it’s impossible to seek something you don’t know, because you’ll have no idea when you’ve found it. If you know what you’re looking for, inquiry is unnecessary, and if you don’t know what you are looking for, inquiry is impossible. Socrates’ response involved asking an enslaved child questions about geometry. The boy answered several of these correctly, but he was equally confident of his incorrect answer. An early example of the Dunning-Kruger effect.

In most areas of knowledge, you start with what Gullander (1974, p20) calls ‘unconscious incompetency’. Take the example of tying a shoelace. As a small child, you had no idea this was a skill that could be acquired, so you didn’t realise you had anything to learn. You gradually became aware this was a skill your parents or others possessed, at which point you moved on to ‘conscious incompetency’. You knew the skill existed, but you hadn’t acquired it. Somebody showed you how to tie your shoes, enabling you to reach ‘conscious competency’. At that point, you had the necessary skill but, in order to succeed, you still had to think carefully about the process every time you carried it out.

The final stage in the process was ‘unconscious competency’, the point at which you could tie your shoelaces without giving the matter any thought. This is the level most people have reached in the things they do regularly in their daily lives. But try learning a new way to tie your shoelaces (Fiegggen, 2023), and you’re right back to conscious incompetency again.

Dunning and Kruger carried out several experiments to investigate how well people are able to gauge their own competency. One of these involved undergraduates at a US university. The students completed a test of logical reasoning, and were then asked to rate their skills and performance relative to their classmates. Half of them then received a short training session on logical reasoning, while the other half of the group received a short training session on something unrelated. They were then all asked to rate their skills and performance once again. Those who had done very badly on the original test overestimated their results at first, but their estimates became significantly better after receiving training in logical reasoning. Those who had originally done badly and didn’t receive relevant training remained unconsciously incompetent and continued to believe they had done well on the original test.

As well as investigating logical reasoning, Dunning and Kruger carried out other investigations. One of these focused on grammar and was carried out with students from Cornell University. The two scientists found that more than half the students thought they were above average at grammar (statistically, only half of them could actually have been above average) and that, overall, participants overestimated how many grammar questions they had answered correctly. The students who were least able to assess their own performance correctly were the ones with the lowest scores. The scientists noted that this group ‘grossly overestimated their ability relative to their peers’ (Kruger & Dunning, 1999).

Although individual students believed they could identify grammatically correct standard English, this may have been because they didn't actually know some of the formal rules of the language. They considered writing to be grammatically correct not because that was the case, but because they weren't aware of its flaws. At the other end of the scale were those who had unconscious competence. They knew all about grammar, they had all the necessary skills, and they took them for granted, assuming that everybody has a similar set of skills. So, the people at that end of the scale tended to underestimate how competent they were. They misjudged their own competence because they mistakenly over-estimated the competency of their peers. At both ends of the scale, people misjudge how competent they are in relation to others. Experiments by researchers in different countries have shown this inability to judge your own competence is widespread.

Investigations and experiments have repeatedly shown that people tend to inflate their ability in specific areas. One study (Svenson, 1981) asked drivers in the USA and Sweden whether they rated themselves more or less skilful than the median driver (if you lined every driver up in order of skill, the median driver would be the one in the middle). In the USA, 93% of respondents thought they were better than the median driver. In Sweden, 69% of drivers put themselves in that category. Overall, there was a strong tendency for people to believe they were safer and more skilled than the average driver.

This supported the findings of an earlier study (Peston and Harris, 1965) that compared 50 drivers who hadn't been involved in accidents with 50 drivers who were similar to them in many ways but had been hospitalised in car accidents. Thirty-four of the people in this second group had actually caused the accident that had put them in hospital. Overall, the group involved in accidents had been responsible for more traffic violations. It seemed clear which set of drivers was the most skilful. However,

when people in the two groups were asked how skillful they were as drivers, both groups gave the same response. Both groups felt they were closer to 'expert' than 'very poor'.

Surely, though, educators – people who spend considerable amounts of time assessing the performance of others and do that, in part, because they have been subject to a great deal of assessment themselves – will not fall victim to the same effect? Turns out they do. Over 90% of faculty members believe they're above-average teachers, and two-thirds of them believe they're in the top 25%.

'But wait!' we hear the die-hard *Pedagodzilla* fans cry. 'We listen to every episode of your podcast, without fail. We know from the introductions that Markzilla is a man with a PhD, while Mikezilla is Impostor Syndrome Incarnate. If everyone thinks they're much better at things than they really are, how can anyone ever develop that syndrome?'

What the literature agrees on is that Impostor Syndrome occurs when people doubt their own skills and talents, fearing that they'll be exposed as frauds. They may not feel they deserve their success; they may not feel they're as intelligent as others believe them to be; they may feel they're deceiving others about their abilities. Initial research into the syndrome was carried out with women who had displayed academic achievement and had been formally recognised for their professional excellence. Despite external validation of their skills, they believed their success was due to luck, or to others over-estimating their skills. Since then, research has shown that this insecurity affects both men and women, and that up to 70% of the population may experience this anxiety at some point in their lives.

While most of the emphasis in work on the Dunning-Kruger effect is on people overestimating their abilities, at the other end of the scale are the people who are experts or who are capable of performing well above average. These people misjudge their

own competence because they mistakenly over-estimate the competency of their peers. Once they have skills and knowledge, they overestimate how much others possess the same skills and knowledge. So, Impostor Syndrome in this group is likely to arise because they overestimate the abilities of those around them.

In experiments, when top performers are shown how others have responded to a test or quiz, they see that others have done less well, and they revise their estimates of their own performance. They can do that because they can distinguish between good performance and poor performance. Poor performers, on the other hand, remain unaffected by seeing the responses of others because they have no way of judging which responses are good or bad.

There are multiple episodes of *Come Dine with Me* where the Dunning-Kruger effect has been clearly apparent. Many contestants have been sure they were not only fantastic hosts but also ‘incredible chefs’ and have believed that winning was a foregone conclusion, only for things to unravel when their ability did not live up to their self-belief.

The answer

So, how can you possibly know if what you are serving up is any good?

If you don’t know what good looks like, then you have no way of knowing whether what you’re doing is good, or of judging accurately whether you’re performing better or worse than others. Up to the point at which someone’s current knowledge and skills are challenged, they’ve usually been surrounded by people who don’t have the experience and criticality to challenge their assumptions. If you’re part of a community that agrees with you, but lacks the expertise to set your performance in a wider

context, its members have no way of providing feedback that can increase your understanding of the objective standard at which you’re operating.

The Dunning-Kruger effect makes for gripping television. Hours of footage are selected and edited to emphasise mismatches between individuals’ beliefs and reality. Potential contestants who are aware of their own inadequacies are unlikely to apply to take part, and even less likely to be selected. Those who believe they are the best cook in the region on the basis of their neighbour’s opinion are more likely to make for an entertaining set of episodes, especially if they’re paired with someone so supremely confident they’re an excellent chef that they decide to make their first-ever soufflé in front of a national audience.

Reality show producers must always be on the look-out for people who are at the point of maximum confidence combined with minimum competence. Appearing on *Come Dine with Me* forces such people to face something they’ve never confronted before – a real-world assessment. The resulting clash between self-belief and external reality may be traumatic for contestants, but riveting for viewers.

Of course, food tastes vary. As in so many areas of life, feedback is subjective. One of the problems for the show’s participants is that there are no predefined and transparent criteria that can be used to assess their expertise and provide feedback. Trying to meet undefined criteria is a frustrating process that leaves them vulnerable to the Dunning-Kruger effect as they strive to produce something that is objectively good, when all they have to base their assessment on is their own subjective judgment, usually based on very limited experience. A clear assessment framework would provide a structure for commenting on what has gone well and what needs improving – but where’s the fun in that?

Come Dine with Me contestants have the bare bones of a framework for assessment along the lines of – What did you think of the starter, the main, the dessert, the presentation, and the evening as a whole? What they don't have are any criteria for that assessment other than personal taste. There are no guidelines that are applied in all cases. Here's where the show differs from ones such as *Masterchef* or *Lego Masters*. Those shows have experienced judges, who usually state in advance some of the characteristics they're looking for. Part of the reality TV appeal of *Come Dine with Me* lies in the variable criteria applied subjectively by each participant.

Until I visited Japan, I believed I had a minimal knowledge of Japanese culture.

I share this in some of the Pedagodzilla episodes, reflecting on Ghost in the Shell, Godzilla and Studio Ghibli movies. However, once in Japan, I walked into a warehouse full of manga and DVDs and didn't recognise anything in there. I'd expected the visit to confirm I had some knowledge and expertise. Instead, the experience showed me I really knew nothing. -Markzilla



Therefore, it's easy to reject feedback that doesn't align with the way you see your own abilities. It's difficult to have your viewpoint or judgment challenged, particularly if it relates to a piece of work or skill you're proud of. It's tempting to ignore feedback (research shows that many students never look at tutor feedback), to reject the expertise of its provider, or to plunge into anger or depression. It's difficult to be open to the fact that your worldview may have been correctly challenged by somebody who knows a bit more than you do. As the Muppets showed us in the previous chapter, learning is about transformation, and transformation is tough.

It's important for learners to develop the resilience to keep going as the world shifts around them and they are introduced to a whole new perspective on their abilities. The key to skill acquisition is to practise; to try and try again. When you're new to a skill and most likely to be deceived by the Dunning-Kruger effect, it's useful to bear in mind skill-acquisition logic – you're probably not as good as you think you are and you need to keep practising and developing. This is a useful way of thinking that prevents your level of incompetence from clouding your actual ability.

So, whether teaching or dining – **how do you know if what you are serving up is actually any good?** On your own, you can't know for sure but there are ways of checking your beliefs that can help you to identify when you are on the right path, and where you should be directing your attention. Definitely don't rely only on your own judgment or the judgment of those immediately around you.

Tips for practice

A set of skills we introduced in the previous chapter and that we'll return to several times are the ones related to self regulation. These are the skills needed when learning to learn. They relate to metacognition (thinking about how you think), motivation, and learning strategies. Some of them, such as goal setting and time management, may seem to be innate skills that people assume don't need to be taught. As a result, some students never acquire them and struggle unnecessarily, not because they're unintelligent, but because they lack crucial skills that would make study much easier. In fact, the Dunning-Kruger effect is strong when it comes to self-regulation – people neither recognise their own expertise nor identify the gaps in their knowledge.

Zimmerman and Moylan (2009), who have done a lot of work in this area, identified a self-reflection phase to self-regulation. One aspect of this is self-evaluation: comparing your own performance with a standard. For students, that standard might be their own prior performance, the challenge of mastering all components of a skill, or social comparisons – how well they think they’re doing in relation to their peers. The standard they choose to assess themselves against influences both their perceived outcomes and their future motivation. It may also leave them vulnerable to the Dunning-Kruger effect.

One strategy here is to foreground and discuss the process of self-evaluation. Which standards are students using to evaluate their own performance – and which standards matter to them? Although it’s easy to assume everyone is aiming for a top grade, students know that not everyone can be top of the class. They’re likely to have their own goals: gaining a pass grade, getting a better grade than a specific individual or group of individuals, or positioning themselves to coast along unnoticed in the middle of the pack. These private goals need not be shared publicly. However, encouraging learners to reflect on what their personal goals are provides opportunities to clarify those goals, revise them, and consider the standards on which they’re based. It can also open up discussion about how we judge the skills and performance of others.

Participants on *Come Dine with Me* start with the disadvantage that they may never have hosted, or even attended, a dinner party in the past. Even if they have, the performance of most contestants suggests their experience is fairly limited. This means they have only the haziest idea of what good looks like and nobody provides them with criteria on which to base their judgment. You’d think by this point they’d have a better idea – after all, they’ve had the opportunity to watch all the previous episodes – but if they’ve watched previous series they

show no signs of learning from them. The situation is different for students to some extent, because they have teachers who can assess their work using a framework and provide feedback within this framework. Surely this helps them to avoid the Dunning-Kruger effect? Possibly, but some approaches to assessment leave students vulnerable.

A lot of assessment is norm-referenced. That is, it works on the basis that half the learners in a cohort are above average, and the other half are below average. If you wanted to, you could line them all up in order of ability and identify the top 50%, or the bottom 10%. That’s very handy if you’re using assessment as a selection process. The local employer has 20 jobs this year? Take the first 20 in that ability line. There are 30 spaces at the grammar school? Take the first 30. There’s one scholarship available? Take the person at the front. Of course, in reality things aren’t quite that simple. For one thing, learners aren’t evenly spaced. Assessment results tend to put most learners towards the middle of the line, with only a few doing very well or very badly. In statistical terms, the line isn’t an evenly spaced ruler, it’s actually a bell curve – imagine the outline of a bell with a steep hump in the middle and a wide rim. Most students make up the body of the bell and are likely to be fairly close in ability. Bell curves are handy because they represent a normal distribution of results, with two-thirds of the results clustering around the average, and the other third evenly divided between high and low. Normal distributions are found all over the place, in areas as diverse as biology and economics, and they’re one of the basic building blocks of statistics.

Bell curves underpin a lot of assessment, particularly when it comes to formal exams. They’re the reason why grade boundaries change from year to year. If an A is always awarded to the top 5% of students, then one year it might go to students with a score of over 98 and the next year to students with a score of over 90.

It's not a measure of how much a student knows about a subject; it's a measure of how much they know in comparison to the rest of the group. The bell curve is so baked into assessment that many teachers norm reference without thinking. They base their understanding of good, bad, and average on their experience of work that has been handed to them before. This can result in extremely opaque marking schemes.

If learners' experience of assessment is that it's always norm-referenced, then they're vulnerable to the Dunning-Kruger effect, because their only option is to judge their performance in relation to their limited knowledge of the performance of others around them. Criterion-referenced assessment would help them to avoid this. This type of assessment makes judgments based on predetermined criteria that are available at the time the assessment is set. The intention is to determine how well someone has mastered an area of knowledge or skill, rather than how well they've mastered it in relation to others. Think of driving tests or music exams. You don't pass these because you have the highest score in the group; you pass because you can demonstrate that you meet all the predefined criteria.

Putting this into practice means making use of criterion-referenced assessment, drawing attention to the criteria, making links with assessment, and encouraging self-reflection. It might involve giving students practice in breaking some of the skills they have already mastered down into separate elements or discussing criteria that future learners might be expected to meet. It can also involve going into detail about what adequate, good and excellent responses to a particular question might look like.

Enjoy the academic credibility. I hope it makes you happy. And these References.

- Dunning D. (2011), 'On being ignorant of one's own ignorance', *Advances in Experimental Social Psychology*, 44.
- Dunning D., (2017) *Why incompetent people think they're amazing*, TedEd
Available at: <https://ed.ted.com/lessons/why-incompetent-people-think-they-re-amazing-david-dunning>
- Feiggen, I.W. (2023). 'Shoelace knots', *Ian's Shoelace Site*, Available at: <https://www.feiggen.com/shoelace/knots.htm>
- Gullander, O.E. (1974). Conscious competency: the mark of a competent instructor. *Canadian Training Methods*, 7(1), 20-21.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77(6), 1121–1134.
- Preston, C.E. & Harris, S. (1965). Psychology of drivers in traffic accidents. *Journal of Applied Psychology* 49, 284-288.
- Svenson, O. (1981). Are we all less risky and more skillful than our fellow drivers?. *Acta Psychologica*, 47(2), 143-148.
- Zimmerman, B. J., & Moylan, A. R. (2009). Self-regulation: where metacognition and motivation intersect. In D. J. Hacker, J. Dunlosky & A. C. Graesser (Eds), *Handbook of Metacognition in Education* (pp. 299-315). Routledge.



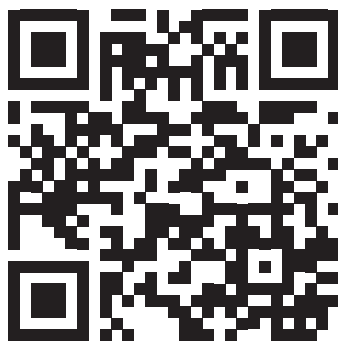
Scan the QR code to listen to
the podcast episode

This is the digital Open Educational Resource (OER) version of *Pedagodzilla: Exploring the Realm of Pedagogy*, by Dr Mark Childs, Prof Rebecca Ferguson, Mike Collins, and Elizabeth Ellis.

We hope you find this useful in your practice or studies. If you do, we'd love to hear from you! Feel free to get in touch at mike@pedagodzilla.com or mark.childs@durham.ac.uk. Your feedback helps us shape our next book.

For more clumsy pedagogy and pop culture mash-ups, tune in to the *Pedagodzilla* podcast at www.pedagodzilla.com.

To access other chapters or pick up a paperback copy (with proceeds going towards costs for our next book), just scan the QR code below.



First Edition 2024.

This OER PDF download is licensed under Creative Commons BY-NC-ND 4.0.

PEDAGODZILLA

EXPLORING THE REALM OF PEDAGOGY



**MARK CHILDS, REBECCA FERGUSON,
MIKE COLLINS & ELIZABETH ELLIS**