

The Failure of Failure

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By Alfie Kohn

A few years ago, two researchers in Singapore published a study that compared the effect of traditional and progressive instruction in middle-school math. The traditional approach consisted of having students listen to lectures and individually solve practice problems with clearly defined right answers. The progressive approach was defined by collaboration, discovery, and open-ended questions.

If you're surprised to learn that the latter turned out to be much more effective – producing “deeper conceptual understanding without compromising performance [on conventional measures of achievement]” across “a spectrum of . . . ability levels” – well, chances are you haven't been following the research in this area. It's long been clear that direct instruction and other traditional practices aren't very effective in general and are particularly counterproductive with younger children. (If an occasional study seems to find that direct instruction *is* beneficial, a subsequent, better-designed investigation will likely overturn such a result.)

So the results described in the Singapore study weren't unusual. What did seem striking was that those results weren't described in terms of the effectiveness of supporting kids in making meaning (rather than just memorizing facts and practicing skills), generating possibilities (rather than being told what the approved procedures are), and learning collaboratively (rather than on their own).

Instead, the outcome was framed as the benefits of “productive

failure.”

If you squint hard, I suppose that taking more time to figure something out could be described as a kind of failure, at least if you tend to think of success as immediately arriving at the right answer. But that’s a weird way to conceive of meaningful learning.

On the one hand, such a description is too narrow. To focus on the struggle (or temporary “failure”) that’s involved is to ignore most of what defines progressive or constructivist education. Much more important are features like a curriculum built around open-ended questions rather than well-defined problems, and a change in the classroom structure that results in having students learn with and from one another. “Productive failure” misses all of this.

At the same time, that phrase is also too broad. It lets in too much by implying (without evidence) that failure is a salient feature of how students experience a progressive classroom. And it taps into a wider conservative narrative about the supposed value of failure and frustration – a recrudescence of the Protestant work ethic.

Thanks to its adjective, “productive failure” magically becomes a good thing by definition. (See also: “healthy competition.”) But the question is how likely it is that failure *will* be productive. And the answer is: Not very. The benefits of screwing up are wildly overrated. What’s most reliably associated with successful outcomes, it turns out, are prior experiences with success, not with failure. While there are exceptions, the most likely consequence of having failed at something is that children will come to see themselves as lacking competence. [[Addendum 2019: A new series of five studies confirms that failure tends to “undermine learning.”]]

We may *wish* that students who do poorly at something will react by squaring their shoulders and redoubling their efforts until, gosh darn it, they turn things around. But that result is more the exception than the rule. When kids “learn from failure,” what they’re likely to learn is that *they’re* failures.

One reason for this is that *trying to succeed isn’t the same thing as*

trying not to fail. The first endeavor isn't always constructive, but the second is pretty reliably destructive. Some of the greatest names in psychology – including Kurt Lewin in the 1930s and David McClelland in the 1950s – emphasized the difference between being motivated to approach success and being motivated to avoid failure. When you actually do fail, that experience tends to trigger the latter motive: an avoidance mentality. The goal isn't to accomplish great things but to cover your butt and preserve a positive view of yourself.

In a typical experiment to explore these issues, children are asked to solve problems that are rigged to ensure they can't possibly succeed. After that, they're given problems that are clearly within their capabilities. What happens? Even the latter problems now tend to paralyze them because a spiral of failure has been set into motion. This doesn't happen in every case, of course, but for at least half a century researchers have documented the same basic effect with children of various ages.

Alas, the fundamental difference between approaching success and avoiding failure will be missed by anyone who tends to focus only on behaviors – what can be observed and measured – rather than on how an individual *interprets* what happened. The good news is that not every goof in setting up a math problem will register in the child's mind as a spirit-crushing Failure.

The bad news is that coming up short may indeed be experienced by children as debilitating, particularly under certain circumstances. As Deborah Stipek of Stanford University explains, that experience may change kids' understanding of *why* they succeed or fail. Unlike "children who have a history of good performance," those who have learned to see themselves as failures are "more likely to attribute success [when it does happen] to external causes, and failure to a lack of ability." A kid who doesn't do well assumes that if he *does* succeed, he must have just gotten lucky – or that the task was easy. And he assumes that if he fails again, which he regards as more likely, it's because he doesn't have what it takes.

This quickly becomes a vicious circle because attributing results to

causes outside of one's control makes people feel even more helpless, even less likely to do well in the future. The more they fail, the more they construct an image of themselves that leads to still more failure. That's particularly true when students are deliberately given overly difficult tasks in the name of "rigor." Or when the failure occurs in the context of intense pressure to succeed – or, worse, to defeat other students who are also trying to succeed. (If little evidence demonstrates the value of failing, *no* evidence has ever found any value in losing – or in pitting children against one another in general.)

Under certain circumstances, yes, it's possible for a child to pick herself up and try again, just as we might hope. But it's simply not the most likely outcome. The experience of having failed is a uniquely poor bet for anyone who wants to maximize the probability of future success. Moreover, it's not just achievement that suffers. Kids who fail also tend to (1) lose interest in whatever they're doing (say, learning), and (2) prefer easier tasks. It's hard for someone to stay excited about something she has reason to think she can't do well, and it's even harder for her to welcome a more difficult version of whatever she was doing. In fact, failure often leads kids to engage in what psychologists call "self-handicapping": They deliberately make less of an effort in order to create an excuse for not succeeding. They're able to tell themselves that if they *had* tried, they might have done much better.

Even someone who really does buckle down and try harder when he fails may be doing so out of an anxious, compulsive pressure to feel better about himself rather than because he takes pleasure from what he's doing. (This is only one of many possible concerns about the idea of "grit" that has taken the field of education by storm.) To that extent, anyone concerned about children's mental health, not just how well they do in school, has even more reason to be skeptical about the tendency to romanticize failure.

All these findings are sobering – or at least they should be. But as with many similar claims about what's good for children, I've noticed that assertions about the value of failure aren't always based on its

actual effects. People who believe it's good for children to fail tend not to back down when presented with contrary evidence. Instead, they insist that "kids these days" are overprotected and have things too easy. Thus, what was originally offered as an empirical claim (about the allegedly positive impact of failure) is revealed to be a matter of ideology: Children *ought* to have to struggle, regardless of its effects.

One last point: What's so powerful about making structural changes – adopting the kind of curriculum and pedagogy described in that Singapore study, for example – is that they really can help students to be more successful (and excited) learners. But to reframe the issue as "productive failure" may distract us from the need for such changes and lead us instead to accept the misleading idea that what kids mostly need is more opportunities to fail. This is closely related to the "fix the kid, not the schools" narrative lurking in the grit fad that I mentioned a moment ago – and also in the closely related enthusiasm for promoting a "growth mindset."

Maybe someone just figured that the language of productive failure is a clever way to sell valuable progressive practices to a wider audience, rather like rebranding them as "21st-century skills" or "brain-based education." But that just raises the question: How in the world did this come to be a selling point? Why have so many people accepted the idea that kids need to fail more?

Portions of this essay are adapted from *The Myth of the Spoiled Child*, published in paperback by Beacon Press in 2016, which contains citations to the research mentioned here.

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