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# Three good reasons teachers shouldn't DIY their lessons

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Expecting teachers to be instructional designers helps no one.

Oregon professor Siegfried Engelmann wasn't your typical education guru. He didn't peddle feel-good platitudes or promote classroom fads – he treated teaching like a hard science, and he built Direct Instruction (DI) to prove it. [Engelmann](#), alongside Wes Becker and Doug Carnine, obsessed over precision: every lesson scripted to the word, concepts sequenced like a staircase, each step designed to guarantee that kids master the material and can generalise important concepts. Too often, we're dazzled by classrooms with kids looking busy and happy, assuming that's the same as learning. Engelmann knew better, and his work suggests we should, too.

Indeed, the most common criticism of DI – that it's robotic and stifles creativity in both students and teachers – profoundly misapprehends his work, which instead challenges us to deeply consider the essence of teaching and the optimal use of the one thing we cannot give teachers more of: time.

Engelmann's critical insight was "faultless communication" – delivering information with absolute clarity and leaving no room for misunderstanding or misinterpretation. In [Reading Mastery](#), a teacher doesn't say, "Let's try some sounds"; she says, "This is /m/. What sound? /m/. Now this is /a/. What sound? /a/. Good." Then the teacher provides practice for all of the sounds that have been previously taught, before having her pupils sound out words with those sounds. It's explicit, choral, unmistakable.

"Zig focused on teaching big ideas, often through the use of rules. Big ideas are those concepts that can be generalised to several content areas," explains [Marcy Stein](#), Professor Emeritus of the University of Washington Tacoma, who worked with him and Carnine on [Project Follow Through](#). "For example, he taught, 'The things at the bottom of a pile go in first.' He introduced the rule using a pile of clothes, then demonstrated how the rule can be applied to the Earth's layers, and finally to historical timelines. One rule, multiple subjects," Stein said.

Every step is spelled out, every concept broken into its smallest teachable unit, every response immediate. It's not micromanagement – it's engineering. The data backed him up: Project Follow Through, a large-scale educational experiment conducted from 1967 to 1995, found that kids taught with Direct Instruction outpaced peers in reading, maths and reasoning – especially the ones we're always fretting about: low-income kids, minority kids and struggling learners.

Engelmann's core insight was that learning isn't a free-for-all – it's cumulative, interconnected and unforgiving of gaps. His [Theory of Instruction: Principles and Applications](#) isn't a beach read; it's a dense, logical blueprint for how humans build knowledge, brick by brick. Long before the 'Science of Learning' was a phrase on everyone's lips, Direct Instruction incorporated its key principles, such as cognitive load, interleaving of concepts and spaced

practice. That's why DI isn't just a curriculum – it's a system, coordinated within and across grades, tested iteratively and refined over decades.

Given all this, why are teachers still hunched over laptops, crafting lessons from scratch or scouring [Share My Lesson](#) and [Teachers Pay Teachers](#) for curriculum materials? It's not their fault – blame the expectation that we have unfairly placed on teachers that 'best practice' means every classroom with its own bespoke plan to catch and engage students. Stein says:

*Teachers have been sold a bill of goods on student motivation, what it means and what it takes to motivate kids. They've been led to believe, 'If I get kids interested, they'll be engaged, motivated and learn'. But that's never held water in evaluations.*

The kids studied in Project Follow Through didn't just outperform those in other instructional models academically – they also scored higher in self-esteem, meaning that academic success drives self-esteem and ultimately motivation, not the other way around.

Engelmann's work illustrates why DIY lesson planning and worshipping to excess at the altar of 'student engagement' doesn't cut it. It's not because teachers are weak, lazy or unprepared. There are three good reasons that teachers shouldn't be stuck doing it: they aren't trained for it, they don't have time for it, and the task itself – complex and interdependent – demands far more than a single teacher can reasonably deliver or be expected to.

### 1 Teachers aren't trained to be instructional designers

Engelmann was an instructional engineer, decades deep in cognitive science, scripting lessons like a coder writes software. Teachers are trained to instruct, not to architect. The skill of instructional delivery is simply not the same as designing an instructional system from the ground up. Asking teachers to match Engelmann's 'faultless communication' – breaking down phonics or fractions into

steps so clear there's no room for confusion – isn't fair. It's not that they're incapable; it's that the mission requires a specialised toolkit they're neither handed nor trained to create. Worse, when we force teachers to be instructional designers, it steals time from the critical instructional delivery and diagnostic work that really matter to student success. A 2017 [MDR report](#) found that teachers spend seven hours a week on average crafting lessons or chasing materials. That's seven hours not spent studying student work to see where Sarah's still tripping over fractions or giving feedback that turns confusion into clarity – high-yield stuff that only a classroom teacher can do, and that moves the needle for kids.

### 2 They don't have time to tackle it

Engelmann's team spent years perfecting DI, tweaking scripts so that the language was student-friendly and testing their sequences with kids. Teachers get a weekend, maybe a college class if they're lucky. That same MDR report pegs them at seven hours a week crafting or scavenging materials – time stolen from refining their craft or analysing student work, figuring out how to accelerate student performance or addressing their problems. The job's already a marathon – grading, parent calls, bringing disruptive kids in for a landing. Now pile on a task that demands more hours than a school day allows and an expertise most don't have. DI's programs hand teachers a lifeline: every lesson, every grade, locked and loaded with clarity and content – no guesswork, no wasted motion. Teachers deserve those tools, not a second shift as curriculum writers or scavengers.

### 3 It's too complex for solo practitioners to pull off

Instructional design isn't just about one good lesson – it's about a web of them, tightly sequenced within grades and across years. Engelmann understood that learning builds on itself – third-grade science preps kids for fifth, fourth-grade maths tees up algebra. A single teacher, no matter

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how sharp, can't map that in isolation. Imagine Ms Smith nailing a unit on the water cycle, while next door, Mr Lee's kids miss it because he went big on dinosaurs. Come sixth grade, half the class is lost when it's time to study erosion. Lesson planning whose default mode is 'student engagement' inevitably invites gaps and repetition – it's a patchwork, not a plan. Instructional design aligns every step and every grade with coherence solo acts can't match. It's not even that teachers are bad at it; the job's just too big for one set of shoulders.

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### Make teaching doable

To be clear and emphatic: teachers aren't the problem; the problem is the job's insane and ever-expanding expectations. They're not trained to design curricula, they don't have time to wrestle with it (let alone to test and refine it), and even the best can't master by themselves the grade-spanning tapestry that Engelmann nailed.

Neither is the aim to teacher-proof curriculum and lesson-planning. Stein points out:

*What people don't understand is that regardless of the fact that they're scripted, Direct Instruction lessons are actually harder to teach than most other programs. It's based on a mastery model. If you don't bring kids to mastery of what's taught in every lesson, then you will get to a point down the line where you can't go on.*

And equity-minded educators take note: it's also an approach that demands the success of every child.

Some will inevitably argue that “no published curriculum meets my kids' interests or needs!” This isn't about banishing your social studies debate or the hands-on science projects your students love – keep those gems.

They'll be more satisfying and nourishing when kids aren't doing projects to learn the content, but have learned the content that enables them to engage in more meaningful projects. It's about leveraging your strengths as a teacher, diagnostician and interventionist, while rescuing you from the impossible expectation that you should be an instructional design wizard, too. As I've written elsewhere, we've unfairly made teaching too hard for mere mortals and in doing so we've discounted the exacting work of instructional design. We've got to rethink the demands choking teachers' time and make the job doable. Engelmann handed us a playbook that's tested, sequenced and ready. Let's use it – or something very like it – and let teachers teach.

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*This article originally appeared on the author's blog, [The Next 30 Years](#).*

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