

# The Myths & Facts About Direct Instruction

 [evidencebasedteaching.org.au/direct-instruction-facts-myths/](http://evidencebasedteaching.org.au/direct-instruction-facts-myths/)

Shaun Killian



Direct Instruction (DI) has been [in the press a lot](#) lately.

Aboriginal leader, Noel Pearson has been campaigning for schools to adopt DI, and the federal government is throwing millions of dollars behind the idea.

Yet, teachers unions and some academics are urging caution, leaving many to ask:

- Why is Direct Instruction so controversial?
- Is it a good idea or not?

Before seeking an answer to these questions, it is essential that you understand what Direct Instruction actually is.

## What Is Direct Instruction?

Direct Instruction emerged from Siegfried Engelmann's *Theory of Instruction*.

Direct Instruction involves:

- A carefully **sequenced curriculum** of knowledge and skills
- The **explicit teaching** of that curriculum
- Flexible **ability grouping**, with children placed where they are at, within this curriculum sequence
- **Mastery learning**, where children progress to the next level only when they have mastered the level they are at (just like in *martial arts* and *swimming classes*)



There are specific Direct Instruction programs for different aspects of literacy and numeracy. One such program that is available in Australia is **Spelling Mastery** (available through the [Australian Council of Educational Research](#)).

## Why Doesn't Everyone Embrace It?

Many people resist Direct Instruction for personal, philosophical and political reasons.

At a *personal level*, some teachers feel the prescriptive curriculum and scripted lessons take away their professional right to choose what, when and how they should teach their students.

At a *philosophical level*, many teachers are concerned that Direct Instruction:

- Produces short-term, **surface learning** rather than promoting a deep understanding of the material being taught
- **Flies in the face of progressive educational theories**, such as constructivism and student-centred learning.
- Uses **ability grouping** to organise classes.

At a *political level*, Tony Abbott and Christopher Pyne have endorsed Direct Instruction, automatically making it a target of derision by unions and the political left that dominates education in Australia.

## Why Do Some People Support It?

If Direct Instruction is so controversial and out-of-touch with progressive views of education, you may wonder why anyone supports it.

The answer is simple – **it works**, and it works far better than many other approaches (see for example [Direct Instruction vs. Whole Language](#))

John Hattie reviewed over 300 research studies exploring the impact that Direct Instruction has on student results. He found that Direct Instruction brought about above-average gains:

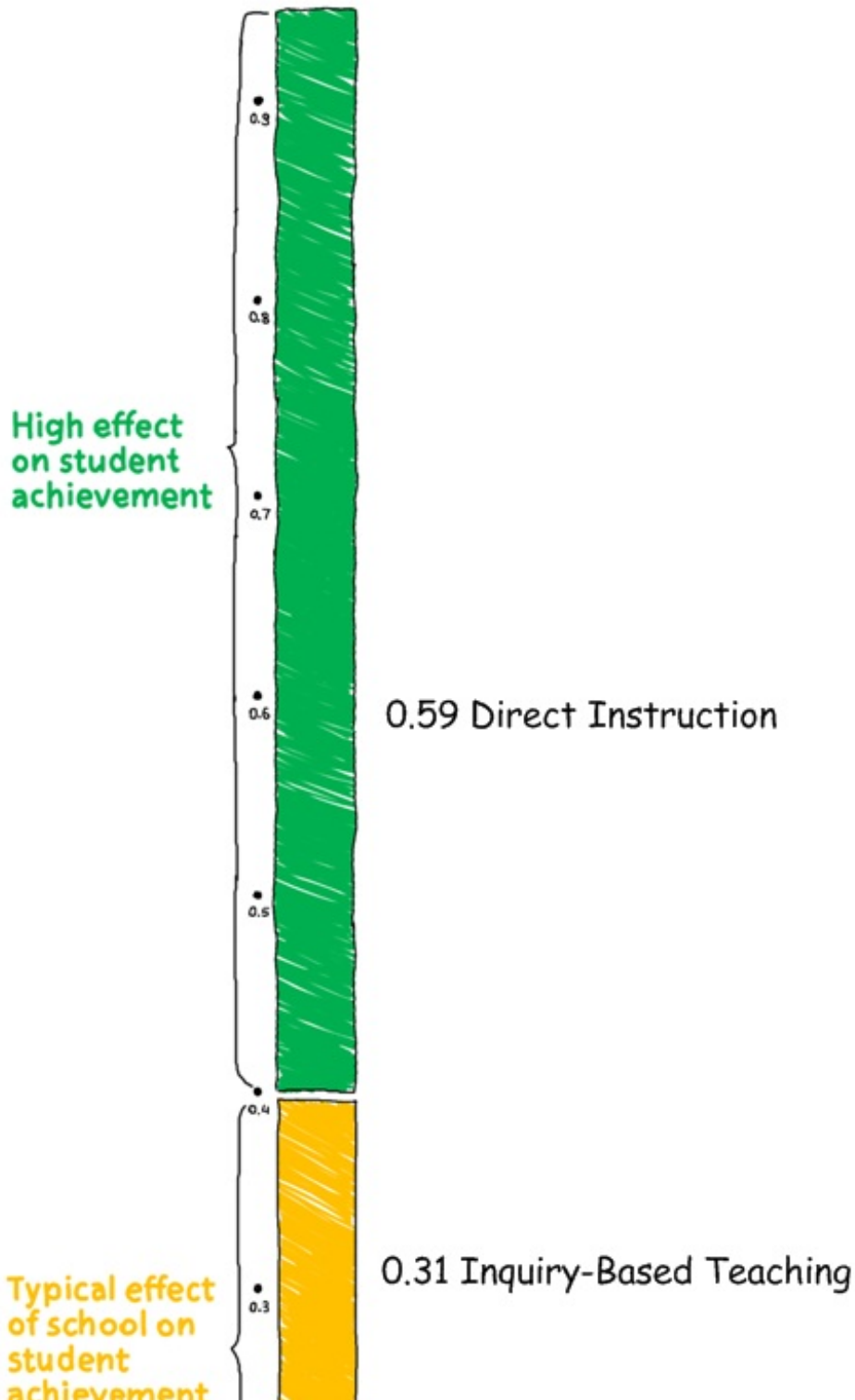
- In both surface and deep learning
- For kids of all ages and all abilities

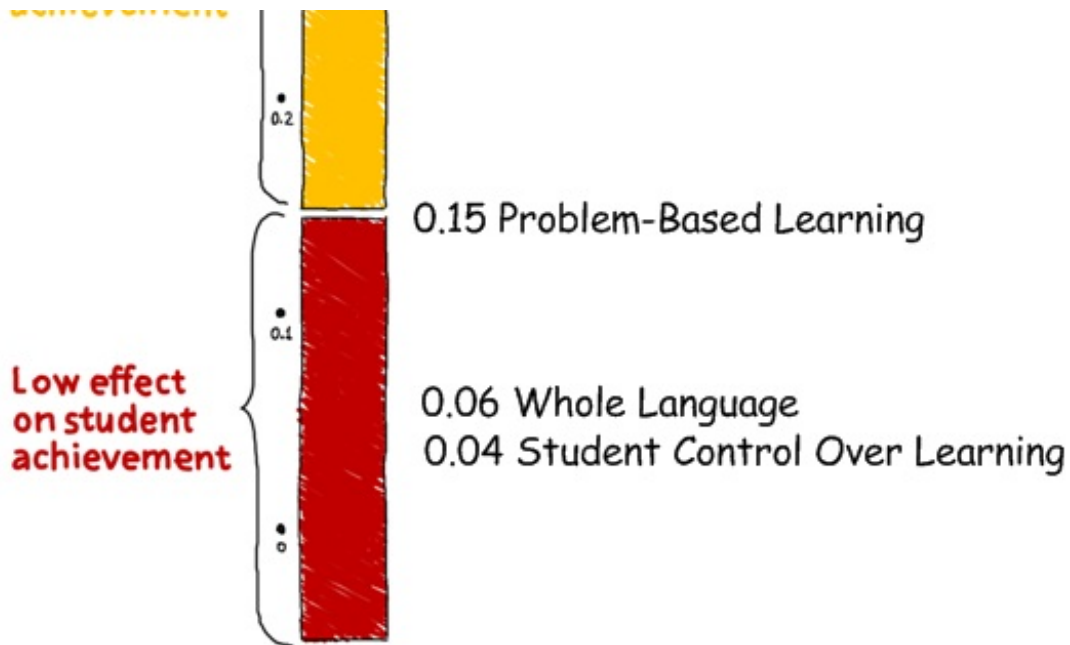
Other research has shown that the benefits of Direct Instruction are long lasting, with students in DI schools:

- Still achieving higher than students of similar ability several years later
- More likely to graduate and gain entrance into university

However, it is true to say that most approaches to teaching work – at least to some degree.

What is important about Direct Instruction is that it works far better than many other approaches. John Hattie's review shows us that DI has twice the effect size of inquiry-based teaching, four times the effect size as problem-based learning and ten times the effect size of whole language.





## 5 Myths About Direct Instruction

Direct Instruction is by no means the only effective approach to teaching, but it is effective.

Fuelled by personal, philosophical and political motives, some people perpetuate a number of myths of Direct Instruction.

### Myth 1: Direct Instruction Is Another Name for Drill & Kill

Some teachers believe that Direct Instruction is all about rote learning – **it's not**.

I've personally used Direct Instruction programs, and know them well.

Direct Instruction does involve practice, but that is not a bad thing. Spaced practice (whether within DI or not) has a powerful impact on student learning.

While DI programs recognise the importance of teaching foundational knowledge and basic skills, students are also taught about higher-level concepts and how to apply their learning to unfamiliar situations. Furthermore, children learn how to [generalise](#) – a key aspect of deep learning.

This is why research shows that Direct Instruction improves both basic and higher-order understanding.

### Myth 2: Direct Instruction Is Teacher-Centred

[Allan Luke raises the point](#) that Direct Instruction gives teachers control over what is taught and when. Technically, the carefully sequenced curriculum does this – not the teachers, but I don't think that is Allan's real point.

Rather, it is the fact that Direct Instruction is not student-centred that seems to be his concern. It's true; DI does not allow students to have input into what and when they learn. Nor does it allow teachers to change the content to reflect student interests, or their perception of what is suitable for different cultural groups to learn.

The myth is that student-centred learning is a good thing. As the graphic above clearly shows – **it isn't**.

### **Myth 3: Direct Instruction Fails to Take Account of Individual Differences**

Allan was also concerned that Direct Instruction fails to take into account individual differences because it offers a standardised sequence of lessons for all students.

Yet, DI addresses the most glaring difference between students through its use of flexible, ability grouping. Students are placed at a spot in the instructional sequence that suits where they are currently at. They do work that isn't too easy and isn't too hard. Rather it is just right for them. Then, they progress onto harder levels when they are ready.

I'm not sure what other differences Allan may be talking about, but research has shown that there is no benefit in trying to cater for things such as learning styles, or for differentiating the way you teach boys vs girls.

It is true that Direct Instruction doesn't contextualise learning (e.g. ensuring there is an Aboriginal person in the story), but people such as Noel Pearson are sick of such token gestures while so many Aboriginal kids can't read and write.

### **Myth 4: The Way DI Uses Ability Grouping Disadvantages Some Students**

Many people have concerns about ability grouping, and there is some merit in this concern.

John Hattie's review of research showed that there was no academic advantage gained by streaming kids according to their ability.

Hattie also shared some well-founded concerns about students on *low track* pathways. These students were permanently placed with other "low-achievers", they were never expected to achieve, and they are given worthless, time-filling work to do. It is therefore not surprising that they don't do so well.

Direct Instruction doesn't use ability grouping this way. All students are challenged to learn and to progress onto the next level. Progress is based on mastery of the material at their current level – not ages, or grades. And, careful timetabling can allow students to progress as soon as they are ready.

It has more in common with levelled dancing classes, than it does with traditional tracking.

This is why, despite the research questioning ability grouping in general, research shows that Direct Instruction:

- Works for struggling, average and high-achieving kids
- Builds and strengthens students' self-concept and self-esteem

### **Myth 5: DI is Boring – Kids & Teachers Don't Like It**

There is a common belief that teacher's need to entertain kids in order to motivate them.

The reality is that doing well at school (just like doing well at anything) takes hard work and persistence over time.

Enjoyment for kids doesn't need to come from 'being entertained'. Research shows that students in DI classrooms are more likely to have positive attitudes to learning. Why? Because their hard work is leading to real improvements – they know it, and they are proud of it. I've seen this first hand, with struggling and reluctant learners viewing their DI lessons as their favourite part of the day.

It is true that many teachers don't like Direct Instruction, but it is largely the ones who have never actually used it. Research shows that the vast majority (96%) of teachers who use DI love it, partly because it provided a clear sequence of progressive skills (from one year to the next) that is lacking in many schools, but mostly because they

see how much it helps their students. After all, that is the reason most of us became teachers in the first place.

## An Opportunity Missed

Despite the wealth of evidence supporting Direct Instruction, research does not suggest that it is the only form of effective teaching.

However, it one very effective approach.

We should be looking at **why it works** to discern the underlying principles that we could then apply in a range of ways.

We should also look at legitimate concerns that people may have – but rather than inflating them and using them to perpetuate an us-vs-them battle, we should explore how they can be overcome.

Sadly, the philosophical and political reaction we are witnessing shows that this is not happening. People are taking one side or the other based on their existing philosophical or political viewpoints, and trying to come up with any argument they can to back up their views.

When I first read about Direct Instruction, my initial reaction was that it sounded too simple and too prescriptive to be any good. However, my passion for evidence based education led me to:

- Explore what the research says – without trying to selectively find data that suited a particular position
- Try Direct Instruction myself using the Spelling Mastery program

Since then most of my concerns have been allayed, and I can't argue with the results it achieves.

## References & Research

Bessellieu, F., Kozloff, M., & Rice, J. (2001). *Teachers' Perceptions of Direct Instruction Teaching*. University of North Carolina.

Hattie, J. (2009). *Visible Learning: A Synthesis of 800 Meta-Analyses Relating to Achievement*. Routledge.

Liem, G., & Martin, A. (2013). Direct Instruction. In J. Hattie, & E. Anderman (Eds.), *International Guide to Student Achievement* (pp. 354-356). Routledge.