Direct Instruction is not a solution for Australian schools

By Allan Luke
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Christopher Pyne is embarking on his own education revolution. He wants our nation’s teachers to use a teaching method called Direct Instruction. For forty years, the specific US-developed approach has been the object of education debates, controversies and substantial research. It has not been adopted for system-wide implementation in any US state or Canadian province.

The method has been used to date in selected Cape York schools in Australia and Pyne sees this as a good reason for all teachers to use it. But the research findings on the approach are mixed and there remains heated debate over how and whether this approach will work and how and whether it can be implemented on a large scale.

First I need to point out there is a difference between Direct Instruction and Explicit Instruction. Minister Pyne has mentioned both.

What is Direct Instruction?

The term direct instruction (DI) is affiliated with an instructional approach and curriculum materials developed in the late 1960s by American and Canadian behavioural psychologists. Programs provided teachers and schools with packaged, programmed instructional models initially in reading and numeracy, later expanding to other curriculum areas. McGraw-Hill now markets these as Reading Mastery, part of the SRA family of materials.

Teachers follow a step-by-step, lesson-by-lesson approach to teaching that has already been written for them. What the teachers say and do is prescribed and scripted, and accompanied by a pre-specified system of rewards. Following strict program of teaching as operant conditioning – teachers teach uniform content in scripted and monitored patterns.

Teachers receive rigorous training and a directive teachers’ guidebook. The strict scripting of teacher behaviour is an attempt to place quality controls on the delivery of the curriculum. The aim of these programs is to take local variation and teacher/student idiosyncrasy out of the instructional mix. The instruction is followed by assessment tasks and tests aligned with
the behavioural goals, the results of which feed back to modify pace, grouping and skill emphases.

**What is Explicit Instruction?**

This refers to teacher-centred instruction that is focused on clear behavioural and goals and outcomes. Students are told *what* they will be learning and *how*, and what they have to *do* to show that they have succeeded in learning whatever it is. The aim of explicit instruction is a strong focus on curriculum content and clarity for all about the criteria for performance expected.

Explicit instruction is affiliated with but not limited to highly structured, instruction in basic skills in early literacy and numeracy education. It is also used in Australian genre-based approaches to writing that stress the value of “explicit” knowledge of grammar and all textual codes. It is a key teaching method used commonly in schools today that has demonstrated efficacy in the teaching and learning of specific bodies of skills and knowledges. Explicit instruction is, therefore, *one* key element of effective teachers’ repertoire of skills and approaches.

It is worth noting that this is one truth of everyday school teaching that seems to elude politicians, journalists and educational commentators: Effective teaching requires that teachers possess and deploy a repertoire of strategies, approaches and methods. The belief that there is a single effective strategy, approach and method ignores the variability of kids, cultures, communities, ages and developmental levels, subjects, skills and knowledges that teachers face everyday.

*There are many criticisms of the DI approach.*

- DI focuses on teacher control of lesson pacing and content and does not encourage the engagement with student cultural resources, background knowledge and community context.
- It desskills teachers by routinizing their work and downplaying their professional capacity to vary instructional pace and curriculum content depending on the student cohort and context.
- It works through strict tracking of student progress and ability grouping, which research shows can severely disadvantage some students.
- Finally, it places the teacher and child in a rigid relationship where the teacher is always the one with the power and knowledge with limited allowance or recognition of individual and cultural difference. This relationship is not conducive to local adaptation of lessons or content to accommodate community, cultural or individual differences, creativity and innovation in teaching and learning.

*Does DI improve students’ achievement and participation levels?*

Reading the research, I have little doubt that DI – and other approaches based on explicit instruction – can generate some performance gains in conventionally-measured basic skills of
early literacy and numeracy. This would also be the case with a number of other popular Australian-based and developed approaches to literacy and numeracy. However, a key question is whether these basic skills are sufficient for sustained gains in achievement or whether they potentially ‘wash out’ in the transition to the upper primary years. This is the ‘holy grail’ of longitudinal (or developmental) effects of these programs that emphasise strong emphases on initial ‘basic skills’ in the early years of schooling.

Many in the field argue that basic skills acquisition is “necessary but not sufficient” for sustained achievement gains. The educational challenge isn’t just about early intervention and better Year 3 scores. The longstanding problem facing schools is when students who have achieved basic literacy, through DI or other approaches, suffer marked problems engaging with reading and writing down the track. This requires a much broader conception and development of the scope and sequence of the literacy curriculum, and an understanding of where, how, all of the ‘language arts’ of oral comprehension, spoken language proficiency, spelling and orthography, writing and genre, and new multiliteracies fit together.

**Should DI be used for the whole school curriculum?**

Can a steady diet of pre-packaged materials, SRA reading lab materials, and other ‘generic’ reading materials generated by US-based curriculum developers in itself suffice for a curriculum, any curriculum, much less the Australian primary school curriculum?

When we used these materials in Canada in the 1970s, they represented ‘generic’ ideas about childhood, about cultures, about histories – rather than those that represented or portrayed the values, ideas, contents, and ideologies of Canada. Particularly in the case of Indigenous education, we know through many lenses that culture, place, context and history count – not just for kids, but for cultures, Elders and communities, for institutions and for the health of society at large. Looking at Navaho schools that had adopted scripted, packaged models, US researchers found that curriculum foci on Indigenous culture, issues and languages declined as part of a more general narrowing of the curriculum.

Wherever we stand on the political spectrum debating the National Curriculum, Australians would agree that the ideas, values, beliefs, histories and cultures that are taught matter.

**Is DI a cost-effective policy investment for medium to large-scale intervention?**

DI is one of many educational programs with an emphasis on explicit instruction on basic and advanced skills. At present, the curriculum materials, teachers’ guidebooks and training, proprietary assessment instruments – which come from copyrighted proprietary sources in Oregon – cost considerably more than locally developed materials, including several explicit instruction models developed in Australia. But then, governments do have a tendency to jump on board the bandwagon of a particular instructional approach – often in spite of mixed research evidence.
In a recent major evaluation report on Aboriginal and Torres Strait Islander school reform prepared for the Federal Government, we found that those schools that were making marked progress on “closing the gap” on conventional measures, were using programs that had been selected and developed at the school-level in relation to local analyses of community and student cultural and linguistic capacities and imperatives. These included: a successful outback school with Aboriginal leadership that had implemented co-teaching, co-mentoring using longstanding transitional bi-dialectal curriculum materials and approaches; a low SES suburban school that melded local Aboriginal cultural studies and community engagement, a strong professional development focus on intellectual demand and quality pedagogy, and innovative after-school program of digital arts in music and video.

In each case, these schools prioritized quality classroom instruction and student/teacher cultural relations, teacher capacity and professionalism, and a strong engagement with and knowledge of local communities, cultures and languages. Our study showed that simply giving principals local autonomy does not generate better results. Indeed, all the literature tells us that principals must function as instructional leaders with a focus on quality teaching. To reiterate a point that is consistent in large and small-scale studies of school reform, the professional conditions need to be set for teachers to work together to plan the curriculum, analyse and track student performance.

I am not ruling out ‘explicit instruction’ or ‘direct instruction’ or an emphasis on basic skills – but these have a much better prospect of making a developmental difference for students’ medium and long-term achievement and success where they are part of a larger school-level approach and broader expansion of teacher repertoire.

Turning the education of Aboriginal and Torres Strait Islander students will require school-level curriculum planning, ongoing analyses of student progress, a focus on quality teaching and intercultural relationships between students and teachers, and a substantive engagement with Elders, parents and communities.

In Australia, the recent ACER report on the Cape York implementation of DI does not provide any clear scientific evidence that DI delivers generalisable cohort achievement gains that yield more sustainable patterns of success as students work their way through elementary and secondary school. It does, however, show that DI can provide one beneficial framework for overall school improvement: through improved staff continuity, planning, developmental diagnostics and professional development in schools where these apparently had been lacking.

In my opinion, explicit instruction in its various forms is one necessary part of an effective teaching repertoire– direct instruction is not and by definition cannot be seen as a universal or total curriculum solution.
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I am not a cheerleader for Direct Instruction (DI) programmes. To be clear here, I am using the convention of capital letters to refer to the curricula developed by Siegfried Engelmann and colleagues. DI units are a set of scripted lessons that teachers are meant to deliver pretty faithfully. It reads as a cry of anguish from the education establishment. The article actually starts pretty well, making a useful distinction between DI and other forms of explicit instruction; a distinction that I am always keen to make when arguing for the latter. It states the usual criticisms of the restrictiveness of the approach which are fair game. A new report from the Centre for Independent Studies described Gonski funding for schools as a ‘fantasy’ and made three proposals for school funding: Hand over full control for school policy and funding to the states. Establish a school voucher system, which provides funding directly to students rather than schools. Create charter schools; these are publicly-funded but privately-run schools. The report argues that: Australia’s school results have been declining in international standardised tests while public debt continues to grow. For the sake of reversing the decline in both the country’s Explicit instruction is affiliated with but not limited to highly structured instruction in basic skills in early literacy and numeracy education. It is also used in Australian genre-based approaches to writing that stress the value of knowledge of grammar and all textual codes. Several major meta-analyses and reviews have identified explicit instruction as a major instructional approach in contemporary schooling. What is Direct Instruction? Programs like DISTAR and CRP provided teachers and schools with packaged, programmed instructional models initially in reading and numeracy, later expanding to other curriculum areas. Australian Council for Educational Research. Australian Education Review. Building quality in teaching and teacher education. With fruitful economic reform in Australia, school graduates are well placed to engage in education that promises a successful career pathway and employment opportunities. However, the world ahead of them is fraught with diverse and differentiated career pathways, with many Australians undertaking up to five career changes in a lifetime. It is significant at this point to ask the question as to whether schools are facilitating learning pathways that compliment this diversity. Further, are teacher education programs preparing teachers for such a challenge? Example of ‘pedagogical guidance’: Direct Instruction. 29. vii. Good to Great Schools Australia (GGSA) was awarded the tender and offered two literacy approaches: Direct Instruction and Explicit Direct Instruction. The choice of literacy approach was made either by the relevant school system or individual schools. Too often, what the critics mean by direct instruction is didactic teacher-led talking from the front; this should not be confused with the very successful ‘Direct Instruction’ method as first outlined by Adams and Engelmann (Reference Adams and Engelmann 1996). Direct Instruction has a bad name for the wrong reasons, especially when it is confused with didactic teaching, as the underlying principles of Direct Instruction place it among the most successful outcomes.