A brief introduction to direct instruction

What is direct instruction? An overview

Direct instruction is one of the most widely used methods of teaching, and it begins with the "clear and systematic presentation of knowledge" with the goal of helping students to develop background knowledge so that they may apply and link it to new knowledge (Kim & Axelrod, 2005). Direct instruction does not mean that learning is passive, or that teaching is reduced to drill-and-practice. Direct instruction is a systematic approach to teaching in which the teacher is very explicit about what students are to learn, the language of instruction clear, and allows teachers the opportunity to monitor their students while teaching, and to provide constructive feedback. Direct instruction should not be confused with rote instruction, which is an approach that requires students to memorize answers and repeat them in rote-like fashion.

Direct instruction scaffolds instruction to meet the needs of each individual student. Direct instruction was an instructional method originally designed to address at-risk students within Baltimore public schools by Siegfried Engelmann, a professor at Johns Hopkins University. The program was first developed as DISTAR, or "Direct Instruction System for Teaching Arithmetic and Reading," and focused on reading and maths. The original aim of direct instruction was to focus on reading instruction, and get all students to the same reading level using a reading strategy called phonics.

How effective is direct instruction?

The effectiveness of direct instruction has been well documented. Project Follow Through, a federally-funded educational programme in the United States, demonstrated empirical evidence for direct instruction as the most effective method (out of 22 forms of instruction), which produced positive results for teaching reading, arithmetic, language, spelling, and positive self-esteem. One study found that over half of the Follow Through graduates finished high school compared to just over a third of the control group students who did not experience direct instruction. Generally, direct instruction is highly effective for teaching multistep procedures that students would have otherwise have difficulty discovering on their own, such as geometry, algebra, and computer programming.

While research has demonstrated the effectiveness of the direct instruction model, critics of direct instruction lament that it is an approach to teaching that leaves little room for flexibility and variation. Studies that have found direct instruction to be ineffective have had a limited scope and incomplete data, which does not render the research robust enough to discount direct instruction as an effective approach to teaching. It is also important to note that there also have not been any consistent findings that reveal any negative effect caused by direct instruction on reading, arithmetic, language, spelling, and self-esteem.

When/ how should direct instruction be used in the classroom?

Some people think of direct instruction as a lecture-style lesson during which students are passively absorbing content and taking notes at their desks, but it does not have to look like this in practice. It is possible to begin a lesson by introducing the main idea to the class and then, to check to see if students are ready to practice the skills and concepts that you presented. You can do this by asking students questions to check for their understanding, and even having your students work in small groups to write down some of the main ideas on a large piece of paper on the wall or on the classroom whiteboard/blackboard. After you have checked students' understanding, you can introduce a short or long-term project through which students can build upon, apply, and review the knowledge gained from the lesson. Other ideas for designing curriculum for direct instruction include:

- *Organising content around big ideas.* For example, in a history class, rather than focusing on the chronological order of events, structure the critical content around patterns in history. When teachers successfully teach their students the background knowledge about these patterns, students can then apply the understanding of these patterns later on. Teachers of other subjects can apply this to their curriculum design as well, focusing the course material around major concepts.

- *Teaching generalizable strategies.* Teach students learning strategies that have the broadest application impact within and across academic disciplines. Allow students to practice and apply these skills through independent and small group work after the teacher-led lesson format.
- *Scaffolding Instruction.* For example, when teaching students writing, provide support for editing. Depending on the students' writing level, some of these editing suggestions could come as a checklist. For new writers, normally in primary school, some questions include "do all sentences begin with a capital letter?" As writers advance in secondary school, instructions can be more sophisticated: "Is there variation in sentence structure throughout your essay?"
- *Reviewing material and instructions.* Reviewing or modelling instructions can help students know what they are expected to do. For example, a teacher may model the steps involved in a scientific experiment that the class will undertake, in order for the students to have a clear understanding of what they are expected to undertake.

For more ideas on how to include direct instruction in your own practice, refer to instructional programs authored by Engelmann and published by SRA/McGraw-Hill.

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