
Synthesis

Individualised instructionⁱ

Moderate impact for very low cost, based on moderate evidence



+3

Individualised instruction involves different tasks for each learner and support at the individual level. It is based on the idea that all learners have different needs, and that therefore an approach that is personally tailored — particularly in terms of the activities that pupils undertake and the pace at which they progress through the curriculum — will be more effective. Various models of individualised instruction have been tried over the years in education, particularly in subjects like mathematics where pupils can have individual sets of activities which they complete, often largely independently. More recently, digital technologies have been employed to facilitate individual activities and feedback.

How effective is it?

On average, individualised instruction has a positive effect on learners, although there is large variation across studies, with some showing small negative impacts.



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For classroom-based approaches, it appears that the role of the teacher may become more managerial, with the increased requirements for organising and monitoring learning activities leaving less time for high quality pedagogical interaction. This may explain some of the variation in impact. Because of this, individualised instruction may be better used as a supplement to usual class teaching, rather than a standard replacement.

Some recent studies have found higher impacts. These projects have tended to employ Digital technology to individualise instruction, and the use of this might explain the higher impacts. For example, technology may enable more immediate feedback on the individualised tasks (for more detail on the impact of Feedback see here).

Latin American evidenceⁱⁱ

There is very limited evidence about the effect of individual instruction on learning in Latin America and the Caribbean. The studies hold that in order to adequately implement individualized instruction teachers must be trained in the proper use of this method. For example, a Colombian study has shown that it is feasible to substantially raise the quality of primary education by changing the role of teachers, so that they are not devoted to transmitting instructions or knowledge, which can be communicated in texts, but focused on ensuring that each student is actively participating in a meaningful learning experience. This intervention has shown a positive relationship with students' learning and their ability to face new situations, because they have exercised and developed their capacity to identify problems, find and process information, and write results related to their inquiry process.

In addition, a descriptive study shows that individualized instruction could be especially relevant for disadvantaged children coming from low socioeconomic background, and rural and indigenous areas.

Overall, it is hard to establish causal relations about the effect of individualized instruction on students' academic performance on the basis of the existing evidence. The lack of conclusive results in Latin America suggests that any implementation of this practice should be done with caution, taking into consideration the local context, needs, capacities, and challenges to be addressed.

How secure is the evidence?

There have been several meta-analyses which support the conclusion that individualising learning for whole classes can have moderate positive impacts. There is, however, some variation, with a number of meta-analyses showing smaller effects.

There is some research from other connected fields, such as computer-based learning, and Bloom's 'mastery learning', where students have instructions broken down into steps, receive feedback on their learning, and only move on when they have 'mastered' a particular step. In both fields, small group approaches appear to be more effective than individualised approaches.

The evidence is mostly drawn from secondary school studies and studies in mathematics, though there is also evidence from other curriculum subjects such as science, history and geography.

What are the costs?

The costs of implementing individualised learning are usually very low. Approaches using technology, such as online tutoring programmes or integrated learning systems, have become less expensive in recent years. Overall, costs are therefore estimated as very low.

What should I consider?

Before you implement this strategy in your learning environment, consider the following:

1. How will you ensure that there is sufficient time for direct teacher interaction with all pupils — individually and as a class — given the increased requirements on the teacher to organise and monitor individual activities?
2. It may be that individualised instruction is only effective for pupils who are skilled in managing their own learning (see Metacognition and self-regulation). What are the implications of this for your pupils?
3. Using digital technology to deliver individualised learning activities can provide learners with effective practice, but learners also need direct instruction from a teacher when learning new content, or when they are not making progress.
4. Have you considered small group learning as a way to meet differing learner needs without reducing the total amount of teaching time that pupils receive?

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