

Why teach skills for learning?

Learning skills are a broad range of skills, behaviour and attitudes that make students better learners. They are mostly (but not exclusively) **non-cognitive skills** related to motivation, personal traits and attitudes, and patterns of thought and behaviours. These non-cognitive areas underlie students' ability and motivation to build cognitive skills.

Learning skills involve:

- *general skills for cognition* or thinking, including working memory, attention management, planning and flexibility, goal setting and evaluation, and critical thinking
- *Self-knowledge*, for example, of a student's own abilities, values and preferences, as well as beliefs about one's capacity and approach to learning and growth
- *emotional competencies*, including recognising and managing emotions, understanding different perspectives, being able to deal with frustration and persist with difficult tasks, resilience, and managing stress
- *social and interpersonal skills*, including social awareness and relationship skills, seeking help, collaborative problem solving, capacity to resolve conflict, and empathy.

Learning skills can be taught, nurtured and reinforced. This is why "skills" is a better term than "traits", as it reflects the fact that students can learn, practise and improve these behaviours. However, learning skills can also include beliefs (for example, a growth mindset), values (for example, putting community benefit above the individual gain), attitudes such as trust and gratitude, or attributes such as honesty and generosity.



Why are learning skills important?

Effective learners demonstrate many non-cognitive skills and behaviours. These include:

- self-awareness, self-confidence and self-efficacy (belief in oneself and one's capabilities)
- goal orientation
- persistence, resilience, grit and tenacity
- self-discipline, self-direction and ownership of one's own learning
- motivation and engagement
- self-monitoring
- metacognitive knowledge such as understanding one's own learning processes and how one learns best, and being able to choose the best strategy for a particular learning task
- social skills for effective collaborative learning
- emotional maturity to take risks, accept failures and persist in learning tasks.

In addition, cognitive skills such as critical thinking, information processing, synthesising and applying knowledge are also important to effective learning.

Students that have developed strong skills for learning perform better in school. For example, self-efficacy (a belief in one's capacity to achieve) and a positive self-concept about oneself as a learner can predict academic achievement in reading, maths and science.

Greater achievement is likely because learning skills enable students to cope better with learning tasks and environments. In addition, students' self-perceptions, values and expectations for success impact on their motivation to persist in learning tasks. This is most noticeable in low-achieving students.

Students who are more self-aware and confident about their learning capacities put in more effort and persist with challenges. Students with well-developed socio-emotional skills show greater prosocial behaviours, reducing time spent on issues of conflict and disengagement, and increasing their time engaged on learning tasks. Skills of self-discipline, organisation and motivation to succeed have a positive impact on study habits. Finally, students with problem-solving skills can better overcome obstacles to their learning and complete tasks.

Over time, the development of these types of non-cognitive skills leads to a greater ability to self-regulate. Students change from being mainly influenced by external factors (rewards, punishment and tests) towards acting in line with internal values and beliefs, including care for others, effective decision making and taking responsibility for one's actions.

Research also suggests that the development of students' non-cognitive skills can help reduce disparities between the achievement of different social and racial groups. Non-cognitive skills can help students catch up when they have missed out in earlier learning.

Some of the most-researched learning skills found to have an impact on student achievement include:

- self-regulation
- motivation
- engagement
- growth mindset

However, the research is very general, and it remains unclear which different skills influence student achievement, and how.

What is clear is that non-cognitive skills are learnable and that teachers should develop strategies to influence their development.