

Teacher instructions



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Throughout their schooling, students pick up a range of strategies for tackling different tasks. Some become great at adapting and applying these strategies across subjects and new challenges, while others tend to stick with what worked once, even when it doesn't quite fit (Dinsmore, 2018).

When it comes to problem-solving, even our most capable learners can struggle to manage the many moving parts of a real-world challenge (Greiff et al., 2014). That's why we focus on building flexible problem-solving competencies—so students can identify their particular skills and preferred roles in problem solving which they can mix and match to find the best solutions. Additionally, this process provides them with areas to focus on for improvement and ways of working that may drive future career choices.

References:

Dinsmore, D. L. (2018). Strategic Processing in Education (1st ed. ed.). Taylor and Francis. <https://doi.org/10.4324/9781315505732>
 Greiff, S., Wüstenberg, S., Csapó, B., Demetriou, A., Hautamäki, J., Graesser, A. C., & Martin, R. (2014). Domain-general problem solving skills and education in the 21st century. Educational Research Review, 13, 74-83. <https://doi.org/10.1016/j.edurev.2014.10.002>
 Schraw, G. (1998). Promoting general metacognitive awareness. Instructional Science, 26(1/2), 113-125. <https://doi.org/10.1023/a:1003044231033>

But we can't just hope they make these connections on their own. We need to guide them through the process, helping them reflect on what worked, what didn't, how they can adjust their approach, and what they'll try next time (Schraw, 1998). These reflections also help students recognise their own strengths—sometimes ones they haven't noticed before—and see the power of working with others who bring different skills to the table. By making reflection a regular part of learning, we give students the tools to become more thoughtful, adaptable problem solvers.

The 'Student Competency Reflection' questions can be used as a guide for a class discussion or a reflective piece of writing.

This type of reflective work is crucial to developing **personal and social capability**.

Self awareness

Personal Awareness

- Level 4 (Years 5-6)
 - Analyse the influence that choices have on developing personal qualities and identify areas for growth

Reflective practice

- Level 4 (Years 5-6)
 - Analyse personal abilities and achievements by seeking feedback

Self-management

Goal setting

- Level 4 (Years 5-6)
 - Select and use strategies to monitor own learning and refine goals to plan for further improvement

Student competency reflection

A **competency** is a mix of skills, knowledge, and abilities that help you do something well. It's like having the tools and know-how to complete a task or solve a problem. Often we need teams of people who each bring important competencies to solving a problem.

Before the task

In the task, which competencies would be the most useful to solve the problem? Why?

After the task

Which problem solving competency did you use the most? Why?

Which did you think you were best at using? Why do you think that?

What did your team mates bring to task? What can you learn from them?

What problem solving competencies were missing? Why?

What problem solving competency do you plan to improve on in the future? Why?
