

Project Zero's Thinking Routines Toolbox

Phase	Type	Themes
<input checked="" type="checkbox"/> Early <input checked="" type="checkbox"/> Implementation <input checked="" type="checkbox"/> Consolidation	<input type="checkbox"/> Strategy <input checked="" type="checkbox"/> Tool	<input type="checkbox"/> Collaboration & teamwork <input checked="" type="checkbox"/> Curriculum <input type="checkbox"/> Design affordances <input type="checkbox"/> Design & process <input type="checkbox"/> Evaluation <input type="checkbox"/> Leadership & change <input checked="" type="checkbox"/> Pedagogy
		<input type="checkbox"/> Professional development & support <input type="checkbox"/> School structures & organisation <input type="checkbox"/> Spatial competencies <input checked="" type="checkbox"/> Student experience <input checked="" type="checkbox"/> Teacher experience <input type="checkbox"/> Technology <input checked="" type="checkbox"/> Time

What does this do?

Project Zero's Thinking Routines Toolbox, developed by Harvard University, makes extensive use of learning routines that are thinking rich. A routine can be thought of as any procedure, process, or pattern of action that is used repeatedly to manage and facilitate the accomplishment of specific goals or tasks. These routines are simple structures, for example a set of questions or a short sequence of steps, that can be used across various grade levels and content. What makes them routines, versus merely strategies, is that they get used over and over again in the learning space so that they become part of the learning culture. The routines become the ways in which students go about the process of learning and can be used in conjunction with particular learning space configurations.

How can it help?

A routine can be used in specific learning settings to ensure students achieve specific goals or learning outcomes. For instance, when using 'Think Puzzle Explore', educators can set up the learning space for individual learning, which allows students to individually engage in deeper inquiry. For the 'Question Starts' routine, the learning space can be arranged to accommodate collaboration between students. As students become familiarised with the routines and learning settings that go with each routine, it provides a shared language about the various ways students learn and engage in innovative learning environments.

An example in practice

Thinking routines, particularly 'See, Think, Wonder', have been used by Museum of Applied Arts and Sciences in New South Wales, Australia, to engage students in learning within the museum environment. These routines are applied to ensure that students are achieving their learning objectives in specific programs held in different settings within the museum. The routines, used with pictures or photographs and other artefacts such as poems or scientific experiments, engage students with the contents within a specific learning setting.

Where can I find this?¹

The full suite of Thinking Routines are available via

<https://pz.harvard.edu/thinking-routines>

[Correct as at 06 May 2020].

1. All Spatial Transition Pathway 'Strategies and Tools' are licensed under a Creative Commons Attribution-Non Commercial 4.0 International License and available from iletc.com.au

Project Zero's Thinking Routine Toolbox

Welcome to **Project Zero's Thinking Routines Toolbox**. This toolbox highlights Thinking Routines developed across a number of research projects at PZ. A vast array of PZ's work has explored the development of thinking, the concept of thinking dispositions, and the many ways routines can be used to support student learning and thinking across age groups, disciplines, ideals, competencies, and populations. Thinking Routines originated in PZ's Visible Thinking research initiative. Over the years, researchers enhanced and expanded upon the original routines, and new projects developed new routines. Some of the larger PZ research projects focused on enhancing thinking include Artful Thinking, Cultures of Thinking, Agency by Design, and PZ Connect. **To learn more about PZ Thinking Routines and their background, watch this video introduction and read more about PZ's initial Visible Thinking research.**

The Toolbox organizes the Thinking Routines into categories that describe the types of thinking the routines help to facilitate. Some routines appear in more than one category, and some routines have different versions that offer modifications for specific age groups or more specific conceptual challenges. When clicking on a routine in the Toolbox, a separate page opens with links to the downloadable PDF of the routine. All routines use a common PZ template describing the purpose of the routine, offering potential applications for the routine, and often providing suggestions for its use and tips for getting started. The PZ research project responsible for developing the routine is noted at the bottom of each page along with the copyright and licensing information and guidance about how to reference the routine. We invite and encourage educators to share their experiences using the routines! Each routine has a hashtag listed just above the reference information. Jump in and get started!

