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## What does research say are practices to support teachers to improve their lesson planning?



### Background

Lesson planning is a [multifaceted process](#) influenced by curricula, available materials, and teacher experience. Most research on lesson plans [involve teacher interviews, observations, or evaluating lessons against specific criteria](#). Many of the causal studies below have identified practices to improve teachers' lesson planning within larger analyses of professional development (PD) programs and their effects on student outcomes. Some [researchers](#) have asked for caution in interpreting causal research on this topic because of the short timeframe (one to two years) of studies since changes in practice and effects on student learning take time. This FAQ includes both causal and non-causal research describing some practices to consider when supporting teachers' lesson planning.

- **Providing teachers with scaffolding tools has shown positive effects on lesson planning.** [One randomized study](#)<sup>1</sup> found that teachers who were provided both comprehensive PD focused on inquiry-based lesson planning and learning strategies and an additional year of online tools and courses that reinforced PD content reported significantly improved lesson plans. In-depth scaffolding supports that encouraged teachers to design inquiry-based instruction from [another randomized study of three science-focused PD programs](#) showed a positive influence on student outcomes.
- **PD focused on research-based instructional strategies may support teachers in lesson planning.** [A randomized study<sup>2</sup> on PD for reading instruction](#) that incorporated collaborative lesson planning and discussions led to gains in teacher knowledge of, planning for, and implementation of best practices, as identified by classroom observation data, with some gains in student outcomes. [Another randomized study of an evidence-based teacher induction program to support instruction](#),<sup>3</sup> which provided beginning teachers with trained mentors, monthly PD, and other supports that were expected to influence instruction, found positive impacts on student achievement among districts that chose two years of PD but no impacts for districts that chose one year of PD. Follow-up exploratory analyses among the two-year districts found that teachers were more likely to receive mentor feedback on improving instructional practices, suggesting student achievement may have been improved because of this individualized support. The program caused teachers to receive more lesson planning support, but the study did not find significant impacts on teacher practices among either one- or two-year PD districts based on its measures.
- **Collaboration with coaches or peers may improve teachers' lesson planning.** Though some studies report mixed impacts of evidence-based PD on practice, others suggest that collaborative coaching is more likely to improve lesson planning when it helps teachers develop more strategic critical thinking skills to apply to their lesson design. For example, teachers report [benefitting from concrete, focused feedback](#) to increase their understanding and incorporation of evidence-based math instructional strategies into lesson plans. Teachers demonstrated increased use of effective literacy practices following coaching support that focused on lesson planning, reflection, and enactment in [a randomized study on literacy coaching](#).
- **Beginning lesson plans with student needs and considerations in mind may facilitate the planning process.** Participants in a one-year teacher certification program who did not have prior education training but [received intensive courses on student-centered instructional strategies in science](#) produced lesson plans with increased "opportunities for intentional, student-centered, and scientifically authentic language use," according to the researchers (p. 857). Despite participants still including some teacher-led instruction, the findings suggest that promoting student-centered learning could lead to more planning for these activities, though more research is needed to understand whether this approach causes changes to practice.



### Additional Resources



An [Ask a REL Response](#) from REL West provides additional research on lesson planning for reading in elementary schools.



One theoretical study explores considerations for a [lesson planning template](#) to address inclusive instruction.



[Teachers report](#) that time is often a barrier to collaborating with coworkers. To address this, districts could consider providing time for collaborative lesson planning.

<sup>1</sup> This study has been reviewed by the What Works Clearinghouse (WWC) and [met standards with reservations](#). The two studies in this bullet were some of the few rigorous studies that directly looked at lesson planning strategies.

<sup>2</sup> This study was [ineligible for WWC review](#) because it was determined to not examine the effectiveness of an intervention.

<sup>3</sup> This study met WWC standards [without reservations](#). Note that this study included multiple components of PD, of which lesson planning was a part.