

# Research on Job-Embedded Professional Learning

According to [Learning Forward](#), job-embedded professional learning is grounded in day-to-day educational practice and designed to enhance educators' content-specific instructional practices to improve student learning ([details and examples here](#)).

Multiple research studies show these impacts. The author of each study below links to the research cited.

- Standards-aligned curriculum combined with curriculum-focused PD are associated with significantly higher student performance and educator understanding of academic standards. In contrast, providing generic strategies divorced from the curriculum makes educators less likely to apply their learning and impact student achievement ([Taylor et al., 2015](#)).
- Professional development should be connected to practice with a focus on content and curriculum ([Blank, de las Alas, and Smith, 2007](#)).
- Collaborative lesson study of standards-aligned math instructional materials changes teacher practice and leads to increases in student achievement ([Takahashi and McDougal, 2016](#)).
- Curriculum-focused professional learning using a standards-aligned math curriculum resulted in changes in teacher beliefs, practices, and increases in student achievement ([Wang et. al., 2013](#)).
- Elements of effective professional learning include a focus on content in a curriculum, active learning, job-embedded collaboration, modeling, coaching or expert support, opportunities for feedback and reflection, and a sustained duration ([Darling-Hammond, Hylar, and Gardner, 2017](#)).
- Sustained and intensive professional development (between 30 and 100 hours spread out over 6 to 12 months) show significant positive effects on student achievement ([Yoon, et al., 2007](#)).

