

## Research on Pre-Service Personnel Preparation

A meta-synthesis of high impact practices for preservice teacher professional preparation was prepared, for ECPC through a formal contract with Pucket Institute (Dunst et al, 2018), to inform institutes of higher education (IHE) on faculty-related practices that have been found to increase university student learning outcomes. A total of 130 studies were included in the meta-synthesis, with a combined total of 3 million+ study participants. Findings from this analysis contribute to the improvement of pre-service outcomes by providing evidence of seven high impact faculty instructional practices that can be embedded into IHE policy, programs and faculty instruction that prepare personnel who work with children birth-5 years old. Ultimately, early childhood (EC) and early intervention (EI) pre-service educators who experience a range of faculty instructional practices are more likely to use instructional strategies within their own EC/EI classrooms and with their students.

### What are Cooperative Learning Practices?



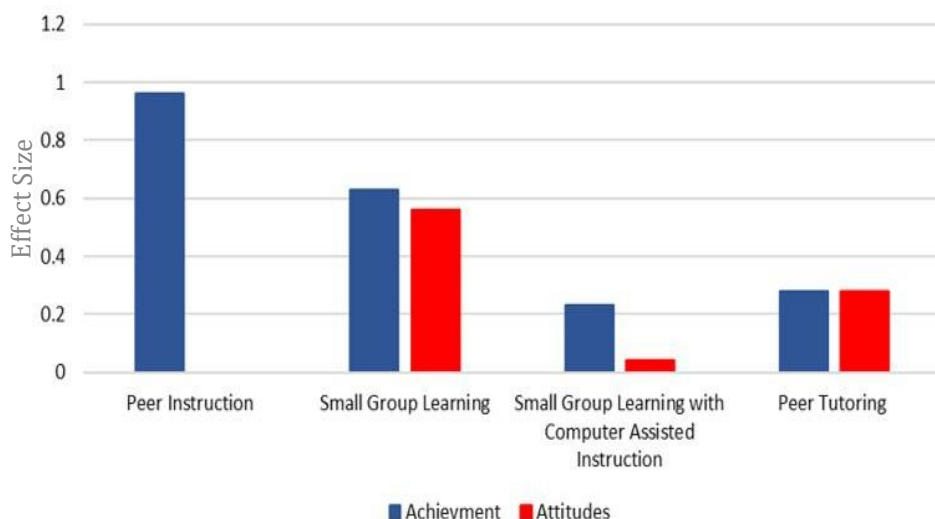
Cooperative Learning Practices include the different types of instruction that allow students to work together to increase their knowledge and use of teaching practices. Cooperative Learning Practices include small group learning, peer tutoring, and peer instruction.

### How is it Measured?



Cooperative Learning Practices were examined using fourteen meta-analyses in which the following groups were compared: small group learning to traditional classroom instruction/individual student instruction, peer tutoring to no peer tutoring, and peer instruction compared to faculty instruction. Outcome measures used in these studies included student achievement/performance and student attitudes toward cooperative learning.

### Relationships Between Cooperative Learning Practices and University Student Outcomes



- 1 Student Field Experiences
- 2 Teaching Methods of Instruction
- 3 Clinical Supervision
- 4 Faculty Coaching & Instructional Practices
- 5 Course-Based Learning Practices
- 6 Web-Based & E-Learning Practices
- 7 Cooperative Learning Practices**

## What Did the Research Find?



The results showed:

- Peer instruction, used during traditional classroom instruction, was found to have the most impact on student achievement.
- Peer tutoring was found to have positive outcomes related to student achievement.
- Positive attitudes and student performance were associated with small group learning experiences; however, small group learning with computer assisted instruction only had a positive impact on student achievement.
- Small group learning with computer-assisted instruction was not related to positive attitudes towards cooperative learning.
- Peer instruction and faculty instruction are equally effective for student knowledge and skill acquisition.



## How Pre-service Preparation Programs Can Use this Information



Pre-Service Preparation Programs can:

- Ensure that faculty use peer instructional opportunities and small group experiences during their traditional classroom instruction.
- Create programs that allow students to engage in peer tutoring.
- Embed peer tutoring opportunities into pre-service preparation programs to increase student achievement.

## References



Dunst, C., Hamby, D., Howse, R., Wilkie, H., & Annas, K. (2019). Metasynthesis of preservice professional preparation and teacher education research studies, *Education Sciences*, 9(50), 1-36.