

A meta-synthesis of high impact practices for pre-service 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.

The Purpose

The purpose of this brief is to share the findings, from the pre-service personnel preparation meta-analysis, to early childhood personnel who have interest, influence and/or planning responsibilities related to preparing high quality EC/EI professionals.

A meta-analysis is a study of the available research in which research findings are combined, statistically analyzed and then summarized. The findings can help IHE administrators, faculty members and students understand research-based practices that lead to higher quality pre-service EC/EI teacher education program, which in turn help new teachers to provide their EC students with higher quality learning experiences.

Seven Evidence-Based Core Practices

The next seven At A Glance Series will share more in-depth information about the research-based practices and how to use them in preparation of highly qualified EC/EI educators. The seven categories of practices found to contribute to the improvement of pre-service preparation programs are:

1. **Student Field Experiences** describe experiences that teacher candidates have to practice their skills, including practicum experiences and student teaching.
2. **Teaching Methods of Instruction** describe the strategies IHE professors use to deliver instruction, including simulation activities and peer instruction.
3. **Clinical Supervision** includes direct observation of targeted skills and performance feedback during the clinically based experience.
4. **Faculty Coaching & Instructional Practices** describe the strategies of faculty coaching, mentoring, and just-in-time training.
5. **Course-Based Learning Practices** describe the instructional practices used by professors to deliver content to pre-service professionals. These include using case studies, problem-based learning experiences, and project-based learning.
6. **Web-Based and E-Learning Practices** describe the use of web-based learning tools and virtual learning experiences.
7. **Cooperative Learning Practices** describes learning opportunities, such as small group learning, peer tutoring, and peer instruction, that allow students work together to learn and practice their skills.

How Can This Information be Used?

Pre-Service Preparation Programs can:

- Evaluate coursework to determine if and how core practices are used within pre-service teacher preparation courses.
- Share the core practices with current faculty and adjunct faculty to enhance their knowledge base of evidence-based practices that support teacher candidate learning and achievement.
- Share with Doctoral Candidates to consider how the core practices can be used to design educational research.
- Use this information to consider pre-service teacher preparation program quality.

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

The Findings

Practices used in teacher preparation programs were categorized into 14 core practices. Each of the 14 core practices included a variety of strategies defining the details of the strategy. These details are explained in subsequent briefs. Practices were analyzed to identify which ones had the highest impact on helping pre-service teachers to learn and use the strategies to improve student learning. The findings identified that seven of the teacher preparation practices had very high and/or high impact, while the remaining seven were found to have medium to no impact, see table below.

Core Practices in Pre-service Teacher Preparation

TEACHER PREPARATION PRACTICES	DEGREE OF IMPACT				
	Very High	High	Medium	Low	None
Clinically-Rich Field Experiences	X				
Teaching Methods of Instruction	X				
Clinical Supervision	X				
Faculty Coaching and Instructional Practices	X				
Course-Based Learning Practices		X			
Web-Based Learning Practices		X			
Cooperative Learning Practices		X			
Methods of Course Delivery				X	
School-Based Mentoring and Coaching				X	
Teacher Degree				X	
Teacher Certification				X	
Teacher Preparation Programs					X
Course Work					X
In-Field Certification					X

Why Are These Findings Important?

These findings describe the evidence-based practices that have the highest impact on student learning and outcomes. Embedding these practices into EC/EI teacher preparation programs means that teacher candidates will engage in a variety of high-quality learning experiences evidenced to have higher student learning outcomes. As a result of using these practices, EC/EI teacher candidates are more likely to use what they have learned in their programs of study to provide young children with high quality learning experiences; thus, improving the outcomes for children.

References

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