

# **A Curriculum to Improve Resident Application of Medical Education Theory: A Constructivist Approach**

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## **Background**

Residents spend significant time teaching co-residents and students. A local needs assessment revealed 96% of pediatric residents felt it was at least moderately important to receive clinician educator training, but only 34% felt that the program placed adequate emphasis on this. Many GME programs have begun incorporating Residents as Teachers curricula, but these are often limited to discrete short-term opportunities that lack in-depth instruction on medical education theory. Thus, we created a “MedEd Core Curriculum” to bridge these gaps.

## **Objective**

To develop, implement, and evaluate a longitudinal curriculum that enhances pediatric resident knowledge and application of medical education theory using constructivism as a conceptual model.

## **Methods**

We developed a curriculum using Kern’s Six-Step Approach, implementing monthly evening virtual sessions in: 1) Learning Theory; 2) Curriculum Development; 3) Teaching and Evaluating Learners. Sessions included reflection, interactive lectures, small group discussions, and real-time application of educational models. Evaluation consisted of a retrospective pre/post survey assessing self-perceived ability to describe and apply principles of medical education theory on a five-point Likert scale. We analyzed the data using descriptive statistics and Wilcoxon-signed rank tests.

## **Results**

Five sessions have occurred to date. Each had an average of 17 participants with an overall survey response rate of 79% (62/78). Ninety-six percent of residents found sessions to be at least moderately helpful, with 77% finding them extremely/very helpful. After participating in a session, residents noted significant improvement in their ability to *describe* each educational model (1.92 vs 3.98,  $p < 0.001$ ). Further, they perceived significant improvement in their ability to *apply* them (1.87 vs 3.41,  $p < 0.001$ ). Residents most commonly described an improved framework for medical education and valued dedicated time for practical application. They highlighted the importance of tailoring educational strategies and evaluation methods towards specific and measurable learning objectives.

## **Discussion**

We successfully developed and implemented a curriculum series focused on medical education theory. Residents built on their existing knowledge and skills through interactive discussion and practical application. Their self-perceived ability to describe and apply core principles significantly improved, and they developed a strong foundation for these conceptual approaches. Next steps include evaluating teaching skills of MedEd Core Curriculum participants against non-participants.