Can We Bridge the Implementation Gap? Educator Preparation for Real-World Contexts
Meet Our Panelists

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Now Let’s Meet!

✧ TodaysMeet:
   – Room Name: BridgingtheGap
   – Link for the Meeting Room
The Challenge and the Opportunity

✧ Ensuring that educators are adequately prepared to implement evidence-based classroom practices.

✧ Identifying strategies and resources for structuring effective practice-based learning opportunities across educational settings.
What Are Practice-Based Opportunities?

- **Practice-based opportunities** are those that afford preservice and inservice teachers opportunities to integrate both content and pedagogy acquired through coursework into instruction.
Infrastructure Challenges

✧ Structural
  – Coursework intensive

✧ Limited Opportunities
  – High-quality field experiences

✧ Program Approval and Certification Standards
  – Perceived inflexibility
Learning to Teach: Brief and Framework

✧ A framework for fully incorporating effective, deliberate opportunities into practice.

– Link for Learning to Teach
Essential Features of Deliberate Practice

**MODELING**
- Candidates are provided examples of what expert performance looks like in practice.

**SPACED LEARNING**
- Candidates are offered sustained and repeated opportunities to practice knowledge and, over a period of time, to deepen expertise.

**VARIED LEARNING**
- Candidates are provided with opportunities to practice their knowledge and skills across varying contexts, with a diverse range of student learners, and with differing degrees of support.
**Essential Features of Deliberate Practice Part 2**

**COACHING AND FEEDBACK**
- Candidates are provided explicit coaching and constructive feedback throughout practice opportunities.

**ANALYZING AND REFLECTING**
- Candidates are provided opportunities to engage in analysis and reflection of practice to deepen their knowledge and expertise.

**SCAFFOLDING**
- Candidates are provided opportunities to practice their knowledge and skills with experiences that gradually increase in complexity over time with fading support from teacher educators or supervisors.
Practical Examples

- Microteaching
- Case-Based Instruction
- Virtual Simulations and Lab-Like Experiences
- Coursework-Aligned, Field-Based Experiences
- Video Analysis
- Tutoring
- Lesson Study
- Coaching
Supporting Framework

Step 1
- Identify critical skills and pedagogy.

Step 2
- Assess and consider program quality.

Step 3
- Analyze practice-based opportunities.

Step 4
- Develop an action plan to strengthen efforts.
Let’s Discuss

◊ What is keeping you from implementing practice-based opportunities?
STRENGTHENING EFFORTS: ENHANCING PRACTICE-BASED OPPORTUNITIES IN COURSEWORK AND FIELD EXPERIENCES

Mary E. Little, PhD
University of Central Florida
A Continuum of Options for Developing Practice
Any of these methods may improve practice

From CEEDAR Convening, 2016
COURSE-BASED PRACTICE EXPERIENCES

- Microteaching
- Case-Based Instruction
- Virtual Simulation
- Tutoring Within Clinical Experiences
- Lesson Study
- Video Analysis and Feedback
Microteaching is a technique aiming to prepare teacher candidates for the real classroom setting (Funmi, Amobi, & Irwin, 2009).

Microteaching also can be defined as a teaching technique especially used in teachers' preservice education to prepare them systematically by allowing them to practice teacher behaviors.

Implemented in early methods courses to practice pedagogical skills (e.g., feedback, questioning) in groups and/or video.
Candidates analyze cases of instruction across various contexts as a method for advancing conceptual understanding of new pedagogical content as well as their ability to analyze instruction and student learning in real-life teaching situations (Kagan & Tippins, 1991).

Implemented in most methods courses to discuss and enhance application of instruction and interventions to address video-enhanced case studies. Currently, 13 video case studies of students with disabilities have been developed for teacher candidates in elementary education programs.
TeachLivE:

- Is a mixed-reality simulation in which 10 minutes is equivalent to 45 minutes to an hour of real time.
- Provides teaching practice to enhance the ability to pause, reflect, and redo pedagogical skills.
- Is often implemented with increased time for teacher candidates to practice necessary teaching skills.
• Clinical experiences in the on-campus reading and mathematics clinic are aligned with practice-based learning in reading and mathematics diagnostic and intervention planning courses.

• K–8 students from the local communities attend the clinic while teacher candidates assess, develop, and deliver instructional/intervention plans, and continuously progress-monitor under the supervision of course faculty.

• Video and synchronous feedback are provided.
VIDEO ANALYSIS AND FEEDBACK

Practice in which teacher candidates’ instructional experiences are captured on video (either synchronous or not) and are used for specific feedback, analyses, and/or discussion regarding teaching practices.
LESSON STUDY AND ACTION RESEARCH

A collaborative, practice-based approach that involves teams of preservice and/or novice teachers in collaboratively:

• Analyzing student data, academic standards, and curriculum;
• Planning a lesson based on the analysis;
• Implementing instruction with students;
• Analyzing instruction on student learning; and
• Debriefing about the lesson and student results to plan next steps.

Implemented during student teaching and the initial years to deepen pedagogical content knowledge through synchronous meetings, student teaching seminars, and mentoring sessions (face-to-face or online).
Final Thoughts

- Linking teacher education to student outcomes is difficult.
- However, we can strengthen links between our preparation experiences and what candidates do instructionally.
- We must learn what effects teacher practice has on important student outcomes.

We can strengthen these links by:

- Building school-university partnerships focused on improving student outcomes
- Allocating more time and effort to promoting the use of a signature set of practices (high-leverage practices and evidence-based practices).
- Studying preparation, practice, and learning using rigorous research designs
  - From CEEDAR Convening, 2016
Intensive Intervention Certificate Project: One Way to Bridge the Implementation Gap

Devin Kearns, PhD
Key Points

- What are intensive intervention and data-based individualization (DBI)?
- How is the project designed to close the implementation gap?
  - Changing programming
  - Selecting good content
  - Using many features of deliberate practice
- How well is the project aligned with the expectations?
Intensive Intervention and DBI
What is intensive intervention?

is an approach to **identifying** academic and social behavior challenges

has the key features of

- being **driven by data**
- increased
- increased **individualization**

based on student response
Who needs intensive intervention?

<table>
<thead>
<tr>
<th>students</th>
</tr>
</thead>
<tbody>
<tr>
<td>with...</td>
</tr>
<tr>
<td>disabilities</td>
</tr>
<tr>
<td>who...</td>
</tr>
<tr>
<td>have not responded</td>
</tr>
</tbody>
</table>
We make changes to

dosage
- days
- minutes
- group size

instruction itself
- alignment with student needs
- focus on transfer to other contexts

student supports
- self-regulation
- motivation
- behavior

progress monitoring
- frequency
- precision
- level

achievement expectation
- student-specific
- standards-aligned
- critical (basic skills?)
Implementation of intensive intervention: DBI
**DBI: Is it useful and used?**

**Useful?**
Yes

**Used?**
Not so much

**DBI systems result in increased student performance.**
Fuchs & Deno, 1982
Schumaker et al., 2005

**There are no estimates of its prevalence, but it has not become widely used.**
How do we increase the level of implementation?

Change programming
- Redesign professional development for inservice teachers
- Redesign preservice training

Select content
- Focus
- Duration
- Coherence

Include many features of deliberate practice
- Modeling
- Spaced learning
- Varied learning
- Coaching and feedback
- Analyzing and reflecting
- Scaffolded practice
Increasing the level of implementation

Change programming

- Redesign professional development for in-service teachers
- Redesign pre-service training
National Center on Intensive Intervention (NCII) at American Institutes for Research

• Is funded by the Office of Special Education Programs (OSEP) of the U.S. Department of Education.
• Is designed to build capacity to implement DBI.
• Funds the Intensive Intervention Professional Development Pilot Project.
• To help institutions of higher education (IHEs) increase the instruction they are providing on DBI.
• To help school districts provide instruction to in-service teachers on DBI.
• Has the long-term goal of making special educators intensive interventionists whose skills have value to schools and districts.

The Intensive Intervention Pilot Project uses the CEEDAR recommendations for designing high-quality, practice-based preparation (and inservice PD), with room for improvement (which is why I am here 😊).
Increasing the level of implementation

Create these new programs strategically

Select content

- Focus
- Duration
- Coherence
How do you select the right content?

Institutions of higher education and school districts may need help...

Many are not prepared to teach about intensive intervention/DBI

How do you provide high-quality instruction on intensive intervention?

Provide the course content
Content: Focus

Courses with 8–10 modules

- Introduction
  - Nature of DBI
  - Progress monitoring
  - Adaptations
  - Explicit instruction as an adaptation

- Reading
  - Reading in DBI
  - Simple view
  - Adaptations for word recognition and language comprehension

- Math
  - Math in DBI
  - Explicit instruction
  - Strategies for fluency and problem solving
  - Adaptations for whole and rational numbers

- Behavior Supports
  - Supports for academic instruction
  - Use of classroom management strategies
Expertise → Coherence

Introduction
- Devin Kearns
- Michael D. Coyne
- Nathan D. Jones, BU
- Mary Brownell, UF

Math
- Sarah R. Powell

Behavior Supports
- Brandi Simonsen
- Jennifer Freeman
- Sarah Wilkinson

Reading
- Michael D. Coyne
- Lana Santoro
- Kaitlin Leonard

Designers and Advisors

Senior Advisors
- Vanderbilt Peabody College
- Lehigh University
- University of Missouri
- CEEAR CENTER
- UConn Neag School of Education
- Texas State University
- UF University of Florida
Increasing the level of implementation

Design the curriculum to ...

Include many features of deliberate practice

- Modeling
- Spaced learning
- Varied learning
- Coaching and feedback
- Analyzing and reflecting
- Scaffolded practice
Online (and In-Person) Modules

Which features are included?

With what impact?
Classroom Videos

Activity 7.1
Example 1

Video models of practice

Discussion of models

MODELING

Activity 7.1
Example 2

A Continuum of Options for Developing Practice
Any of these methods may improve practice

Low Impact

Low Effort

Assign readings, discussion, application papers

High Effort

Student Teaching

Clinical year & coaching

Low Impact

High Impact

Low Effort

High Effort
Curriculum Examples

Anonymized curriculum examples

A Continuum of Options for Developing Practice
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High Impact

High Effort

Low Impact

Effort

Low Effort

Student Teaching

Clinical year & coaching

Early clinical experience: linked to coursework

Independent study, laboratory, & micro-teaching

Individually selected, linked to coursework

Research papers, self-study

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Activities Within Modules

Workbook
Video
Quiz
Discussion board
Journal entry

A Continuum of Options for Developing Practice
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Low Effort
High Effort

Low Impact
High Impact

In class simulations, role-plays, & microteaching
Early clinical experience linked to coursework
Student Teaching
Clinical year & coaching

National Center on INTENSIVE INTERVENTION at American Institutes for Research

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Coaching

- Linked directly to content of modules
- Relies on checklists introduced in each module
- Designed to assure we are not assessing all skills at the same time after teaching them separately
Iterative Design

DBI Through Courses

Introduction

Reading

Math

Behavior Supports

Reading in DBI

Math in DBI

Behavior supports for academic instruction in DBI
Strikes and Gutters: Features × Impact

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Experiences are...

- Somewhat high in classrooms
- Medium in the course-linked and immediate
- Real (curricula and videos) not on own practice
- More demanding across courses not systematic within courses
What can we do better?

Provide **more** (and in-depth) varied experiences
• Use case-based instruction (**build out video examples**)

Have teachers **reflect without direct coach support**
• Reflect with peers in-person or on discussion boards
  • Use checklists during conversations to make them nonevaluative
  • Analyze student progress monitoring data
• Reflect in **online journal entries**

**Scaffold** learning more systematically
• Include **microteaching** even within online classes
• Provide **other practice experiences** outside of real classroom instruction (TeachLive-like)

Advice: **How?**
Recommendation: Use DBI as part of deliberate practice

Advice: **What?**
Summary

- The Intensive Intervention Professional Development Pilot Project is designed to create practice-based learning opportunities.
- It generally follows this idea and includes some deliberate practice.
- There are several specific, actionable ways we can improve the courses in the short term.
- There are larger questions to consider, and we appreciate your thoughts on these!

After today, please contact me with ideas and questions:

Devin Kearns

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Closing Thoughts

What other questions do you have?
Disclaimer

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