**Improving teacher candidate learning through a practice-based approach**

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# Housekeeping

- Facilities
- Padlet: How to use it

# Agenda

1. What is practice-based preparation and why is it important?
2. What are the features of effective practice?
3. Deep dive into two practice-based learning opportunities
4. Analyzing practice-based learning opportunities in your program
5. Next steps in your preparation program

Practice-based teacher education (PBTE) is an approach to preparing novice teachers that focuses on the importance of developing novices' ability to enact teaching practices.

Hauser & Kavanagh (2019)

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**Why is Practice So IMPORTANT to preparing teacher candidates?**

# Why is practice important?

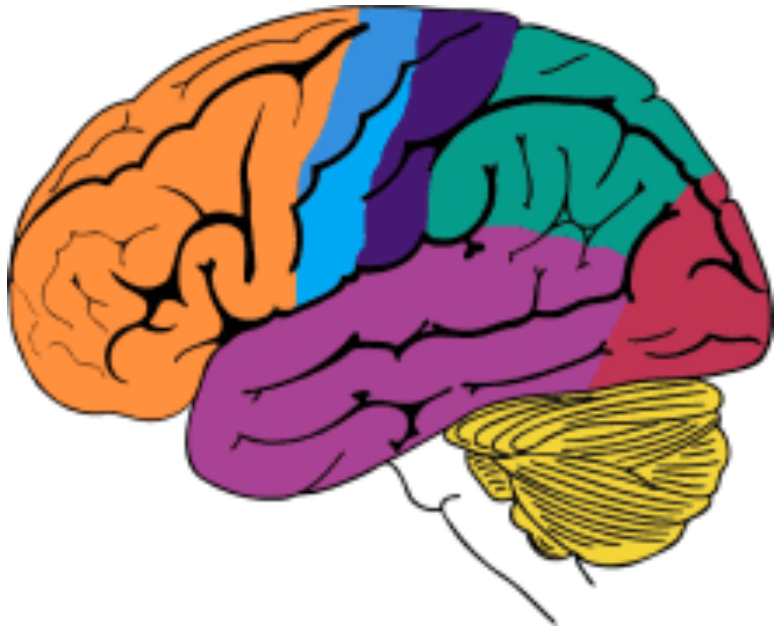Allows for the development of fluent performance and situated knowledge

# AIM OF PRACTICE

- Reduce cognitive load

- Increase reflection & problem-solving

IMAGINE YOU ARE SUPPORTING A TEACHER WHO IS OVERWHELMED BY THE AMOUNT OF CONTENT & CONCERNED ABOUT HOW HARD IT IS FOR THEIR STUDENTS TO LEARN NEW IDEAS, WHAT ARE 4 THINGS YOU MIGHT TELL THEM OR SHOW THEM TO DO?

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Features of Effective

On the critical dimensions of effective performance

HIGH LEVERAGE PRACTICES: THE FOUNDATION

# FEATURES OF EFFECTIVE PRACTICE-BASED LEARNING OPPORTUNITIES (PLOS)

MODEL

Give FEEDBACK

ANALYZE

SELF-REFLECT

# PRACTICE-BASED LEARNING OPPORTUNITY (PLO)

Is an opportunity to enact HLPs or other instructional strategies according to the features of effective practice

# REFLECTION

⋔ **Think about your current program, specifically your coursework. How are you helping candidates practice (using the features we discussed) specific instructional strategies (e.g., high leverage practices or evidence-based practices)? Discuss with your shoulder partner**

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# MCDONALD'S Learning Cycle

Before entering the cycle, you have to develop knowledge of the HLP
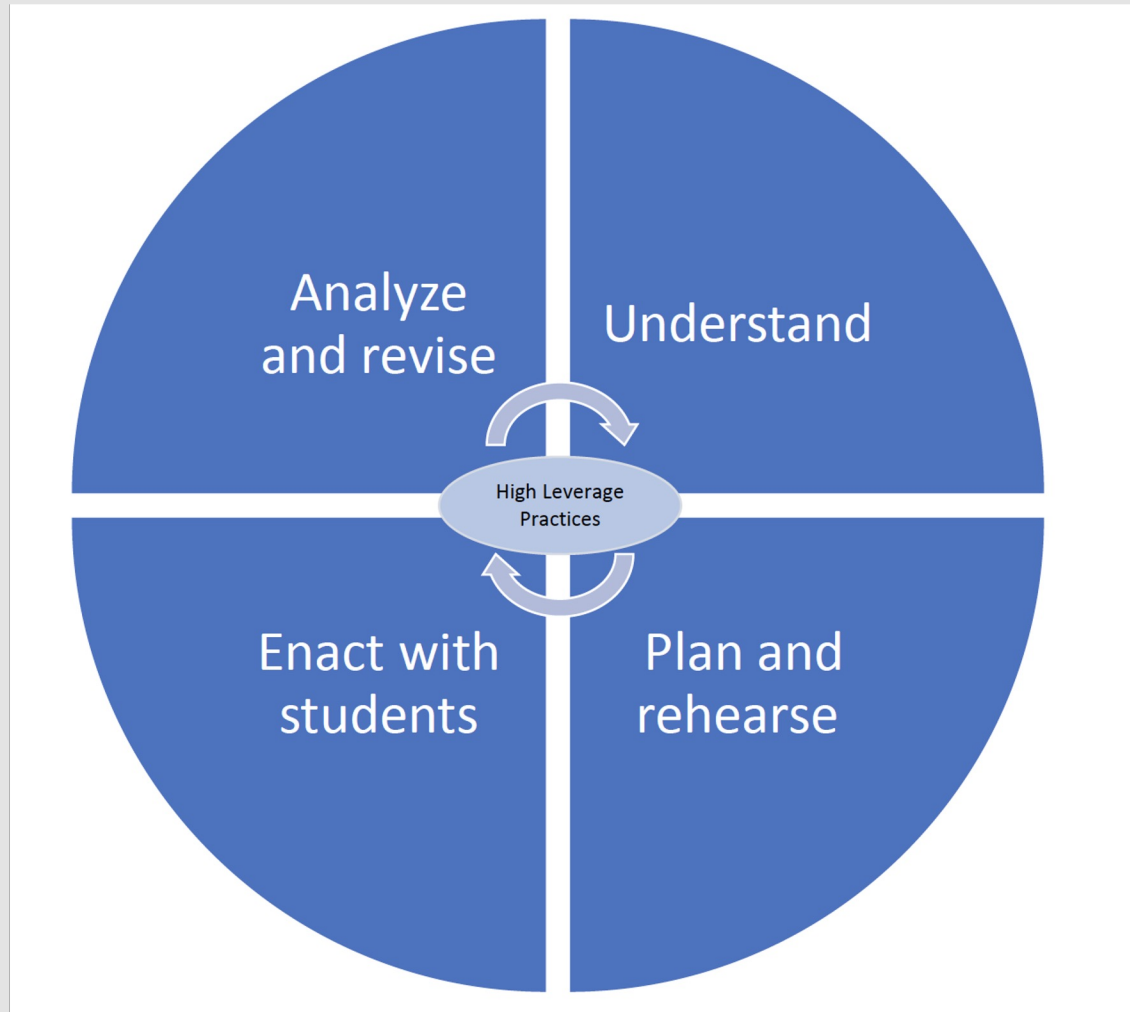
# EACH PLO

- Prerequisite Knowledge

- Planning (except for structured video analysis and performance feedback)

- Implementation

- Debriefing/Reflection

https://ceedar.education.ufl.edu/plos/

# 5 MINUTE STRETCH

# MICROTEACHING

# MICROTEACHING: POLLING



surveymonkey.com/r/TED_1

I haven't heard of microteaching.

I've heard of microteaching but would like to know more.

I'm using microteaching in my instruction.

# WHAT IS MICROTEACHING?

Microteaching is a system of controlled practices that make focusing on specific teaching behaviors and practicing teaching those behaviors under specific, bounded conditions possible (Benedict, Holdheide, Brownell, & Foley, 2016; Brownell, Benedict, Leko, Peyton, & Pua, 2019). In microteaching activities, teacher candidates take turns playing the role of teacher and P-12 students. They have opportunities to discuss and reflect on how they implemented a specific teaching behavior and the impact it had on their peers' learning. They also have opportunities to receive feedback on their performance from teacher educators.

# MCDONALD'S Learning Cycle

Before entering the cycle, you have to develop knowledge of the HLP
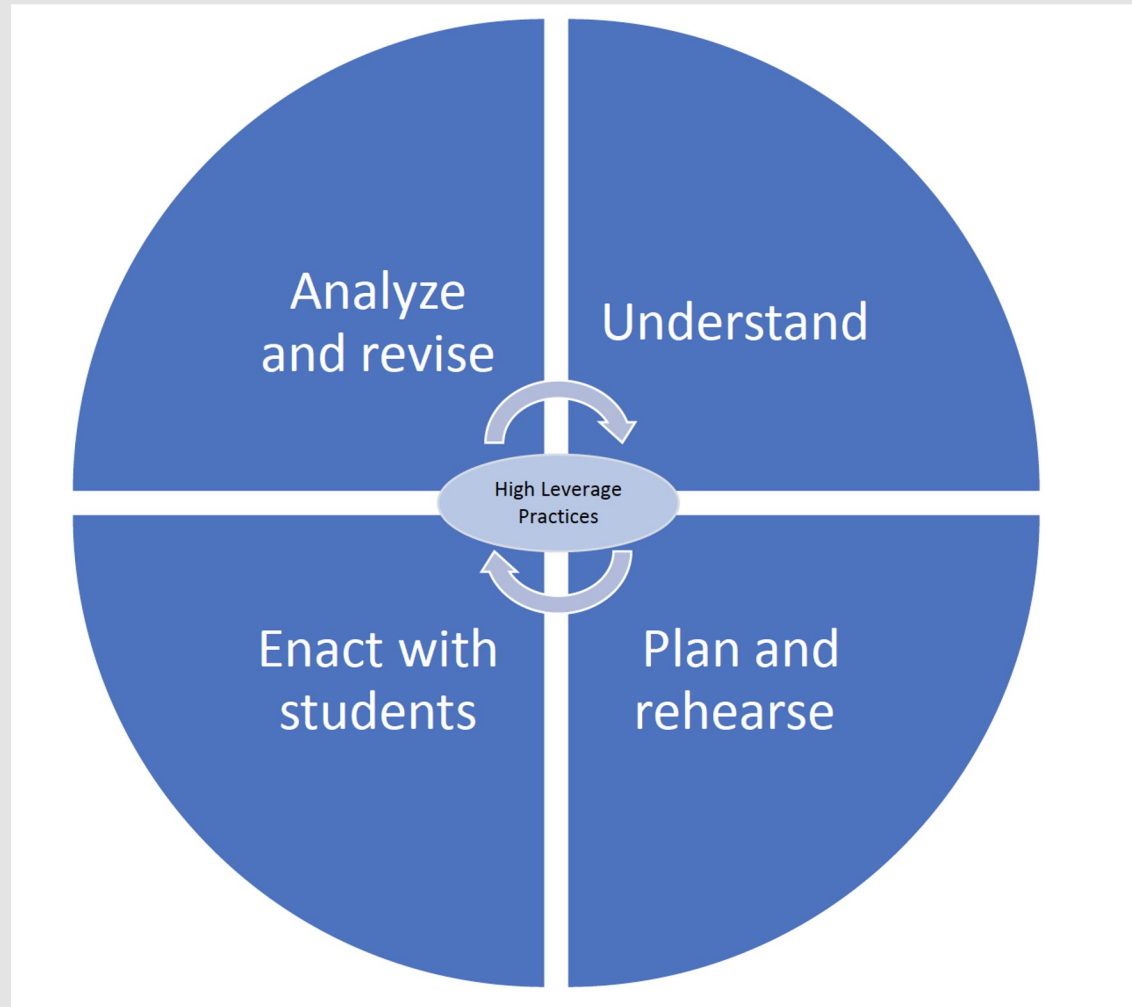
# MICROTEACHING

🧍 The courses I teach:

- Fall of Junior Year: Reading in the Content Areas
- Spring of Junior Year: Language and Foundations of Literacy/ Instructional Strategies Moderate Intense (Co-taught)

| Microteaching is a system of bounded practice that makes it possible to focus on specific teaching behaviors | | | Purpose: Training, Diagnostic Evaluation, Experiment with Innovation |
|---|---|---|---|
| **Phase 1** | **Phase 2** | **Phase 3** | **Phase 4** |
| **PLANNING** | **TEACHING** | **REFLECTIVE COMMENTARY** | **COLLABORATIVE ASSESSMENT** |
| • Identify and prioritize long & short-term learning goals<br>• Develop the lesson plan<br>• Communication skills, self-directed learning<br>• Data collection, Recourses, EBP and HLPs<br>• Plan the technology<br>• Recruit peer support | • 10-20 minutes of instruction<br>• Selected content area<br>• Evidence-Based practice<br>• High-Leverage Practice | • Individually, teacher completes analysis of the recorded teaching, asking:<br>• *What was I doing and how were students responding?*<br>• In a separate column, *what connections can I make to principles of learning-research?* | • Who reached the goal, and who struggled?<br>• What part was problematic?<br>• Misconceptions?<br>• What practical experiences will help?<br>• How to use what you learn about your students?<br>• Collaboration: Celebrate or concerns?<br>• Next Steps |

# PROMPTS FOR THE 2-MINUTE CLIP

- Watch how the candidate engages the "student" in an online environment?

- Notice which component of explicit instruction is occurring during this 2m clip.

- Identify connections to various principles of learning, research, or theory.

## JAMI'S VIDEO LINK

https://web.microsoftstream.com/video/db8db0a6-192f-4ad5-bb16-d1e969f38640

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# PHASES OF MICROTEACHING

ᛉ Planning

- Develop prerequisite knowledge & plan lesson

ᛉ Implementation

- Teach lesson

ᛉ Reflective Commentary

- Instructor helps candidate analyze lesson

ᛉ Collaborative Reflection

- Work through reflective prompts with peers

# TREASURE HUNT (20 MINUTES)

- At your tables. . . .

  - Go to the prerequisite phase of microteaching
    - Open each of the links, including the resources
    - Examine Resource A and identify how you might use/adapt the sample lesson plan
  - Open the links to the other phases and resources
    - Select a resource or two that looks interesting to you and explore it. (The videos of Kate and Steve are great!)
  - Be ready to share insights and questions

# SHARE AN INSIGHT OR YOUR EXPERIENCE IMPLEMENTING MICROTEACHING/ASK A QUESTION

# TIME FOR A BREAK

🙋 Please be back in 15 minutes

# KATE'S THOUGHTS ABOUT IMPLEMENTING MICROTEACHING

# SOCIAL VALIDITY DATA (SCALE 1-5)

|  | Microteach 1 | Microteach 2 | Microteach 3 |
|---|---|---|---|
| Most pre-service teachers found micro teaching to be appropriate. | 4.79 | 4.96 | 4.9 |
| Micro teaching was appropriate to meet the course's needs and mission | 4.85 | 4.79 | 4.9 |
| Micro-teaching phase was effective in meeting the objectives of this course. | 4.74 | 4.83 | 4.9 |

N =30

"This was an excellent learning experience for me and I cannot wait to correct my mistakes for the next one."

"I think Micro teaching is a great way for students to be engaged in the lesson at hand as well as learn multiple techniques that can be kept on hand for when we begin working in our own classroom."

"I really enjoyed this and was surprised with myself at what I was able to achieve. I was super nervous before but was confident that I had a successful lesson in the end."

"I really liked having Kate in the collaborative assessment for mine because I feel like it made it go better. She asked more probing questions about the context than I think my peers would have. It makes it nice to have a teacher available in case there are any questions throughout the process."

"I am really excited to grow in my lesson planning and presentation. I look forward to trying again and building on the feedback and reflection from this microteaching."

# PLEASE GO TO PADLET & PROVIDE YOUR RESPONSE

bit.ly/3ZDhllK

# OTHER PLOS SIMILAR IN STRUCTURE

Simulated interactions

Mursion



Content-Specific Simulated Interaction PLO



Using Simulation Environments for HLP #14

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# 5 MINUTE STRETCH

# Performance Feedback

# TO WHAT DEGREE DO YOU HELP CANDIDATES LEARN TO PROVIDE PERFORMANCE FEEDBACK?



We have not thought about teaching candidates to provide feedback to each other



We have candidates reflect on instruction together, but we do not use a structured protocol



We use a structured observation protocol to help candidates learn to analyze instruction and provide specific feedback



surveymonkey.com/r/TED_2

*PERFORMANCE FEEDBACK IS DEFINED AS A CRITIQUE OF OBSERVED BEHAVIOR THAT IS IMMEDIATE, SPECIFIC, POSITIVE, AND CORRECTIVE WHEN NEEDED, DESIGNED TO MOVE THE RECIPIENT TOWARD A DESIRED PERFORMANCE.* (CORNELIUS & NAGRO, 2014, P.135)

PERFORMANCE FEEDBACK CAN BE USED TO IMPROVE AND MAINTAIN IMPLEMENTATION OF SPECIFIC INSTRUCTIONAL PRACTICES EVEN WHEN FEEDBACK IS WITHDRAWN (BROCK & CARTER, 2017; CORNELIUS & NAGRO, 2014; FALLON ET AL., 2015).

# PERFORMANCE FEEDBACK PLO

Designed to develop candidates' skill in providing peer performance feedback on:

- Use student assessment data, analyze instructional practice, make necessary adjustments that improve student outcomes (HLP#6)

- Use explicit instruction (HLP#16)

- Use strategies to promote active student engagement (HLP#18)

- Provide positive and constructive feedback to guide students' learning and behavior (HLP#22).

# MCDONALD'S Learning Cycle

Before entering the cycle, you have to develop knowledge of the HLP



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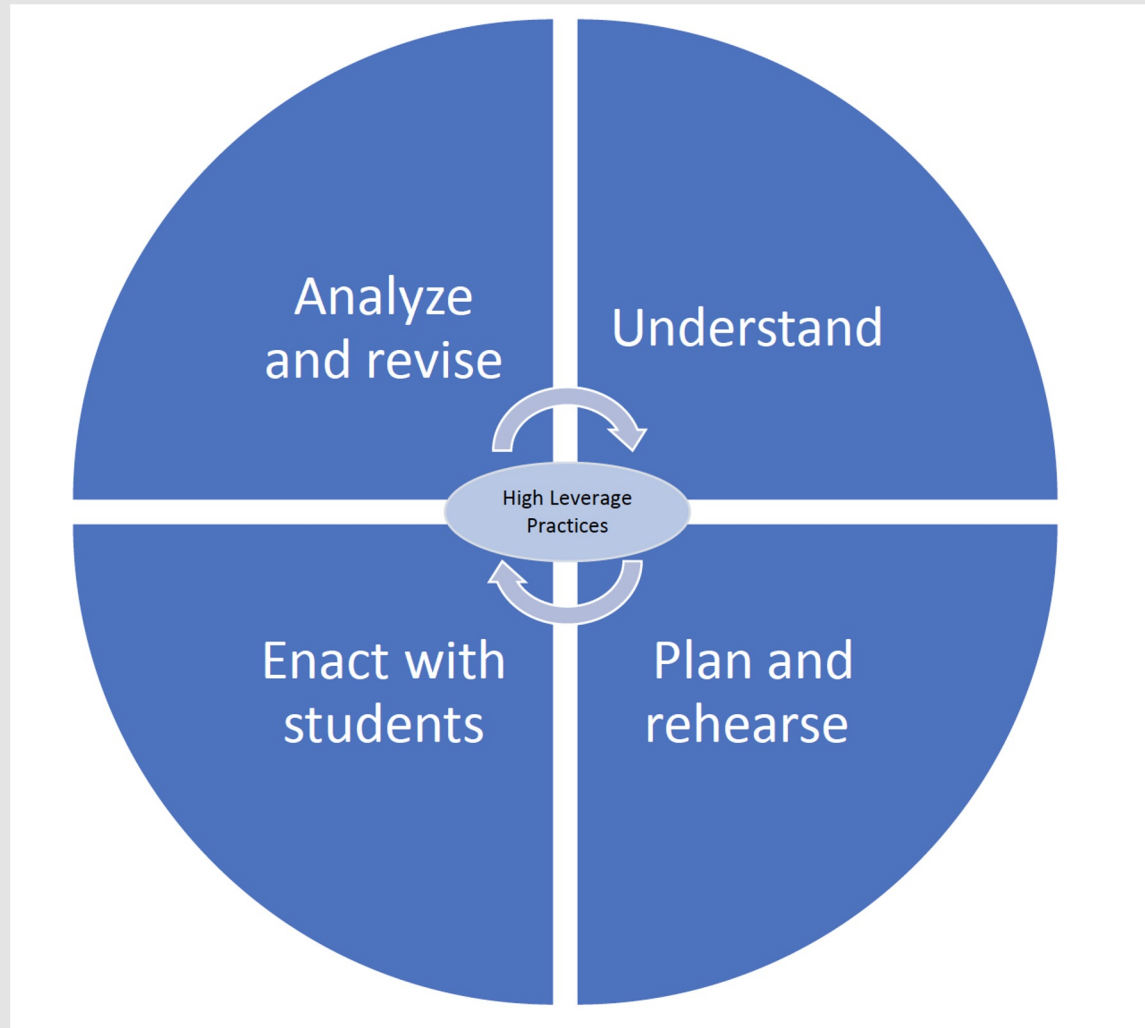
# PROGRAM CONTEXT

- Last semester of classroom work

- Math and Reading Methods course

- Aligned with a targeted field placement

- Students learn about feedback (giving and receiving)

- Learn to use the protocol

- Implement in Field Experience

Clip of students engaging in microteaching activity to get ready for feedback activities – may not need for this presentation

# CLASSROOM OBSERVATIONS OF STUDENT–TEACHER INTERACTIONS (COSTI)

**Characterizing high-quality, explicit instructional interactions are three key components:**

- Clear and concise teacher demonstrations,

- Frequent opportunities for students to practice what teachers demonstrate

- Timely academic feedback from teachers to students related to students' attempts to solve academic problems. (Doabler et al., 2014, p.305)

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# Student-teacher interactions



## Quantity or Quality

- The frequency of student practice opportunities is pivotal in a number of academic areas, including early literacy (Smolkowski & Gunn, 2012), and early math development (Doabler et al. 2014).

- Whereas, the quality of interaction (checks for understanding and teacher feedback) lead to higher gains in conceptual and procedural understanding of math (Doabler et al., 2014)

# Developing Prerequisite Knowledge: Phase 1

- Review/reteach components of "effective instruction" addressed in observation tool

- Model how to use the tool using videos of other faculty

- Provide "guided practice" opportunity. Instructor and candidates together watch videos of Anita Archer deliver instruction https://explicitinstruction.org

# Learning How to Provide Feedback: Phase 2

- Readings followed by discussion about performance feedback, including examples and nonexamples

- Model how to provide performance feedback through role play with candidates

- Candidates practice giving feedback to each other using role play scenarios (e.g. making a sandwich)

# Planning for Instruction: Phase 3

- Partners work to develop lesson plans for their field experience
- Partner A goes to the Field Experience and delivers the instruction Partner B observes
- Partners select 1 Math and 1 Reading lesson as a focus lesson and send videos to instructor
- Partners switch roles after 5 weeks

# Scoring & Providing Feedback: Phase 4

- Partner B scores all weekly videos

- Partner B provides A with feedback on the focus lesson while instructor observes and listens

- Instructor scores the video of the focus lesson using the protocol

- Instructor provides candidates with feedback. Performance feedback is the target

- Partners reverse roles and the process repeats

Interventionist_____     Content_____     Date of Lesson_____     Observer _____

### B1. Implements data collection

**Critical element:**
- Monitors academic progress and collects data at least at one point in the lesson

| 0 | 1 | 2 |
|---|---|---|
| Data collection is not addressed or is not correct | **Monitors academic progress and collects data at one point in the lesson**<br><br>**Does not use data** to make instructional decisions throughout the lesson | Monitors academic progress and collects data at **multiple points** in the lesson<br><br>Accurately records errors made within the lesson<br><br>**Uses data** to make instructional decisions throughout the lesson |

### B3. Delivers model/input

**Critical elements:**
- Delivers a correct description/demonstration
  - Was the description accurate?    Yes   No
  - Was the demonstration accurate?  Yes   No

| 0 | 1 | 2 |
|---|---|---|
| Does not deliver correct and clear model | Delivers a correct and clear description/ demonstration | *All items in one **and** the items below.*<br><br>Delivers a correct and clear think-aloud, examples /non-examples, and demonstration of how to use supports<br><br>Delivers model using multiple means of representation |

### B6. Facilitates unguided practice

**Critical Element:**
Unguided practice is completed without teacher or peer assistance

| 0 | 1 | 2 |
|---|---|---|
| Does not deliver correct unguided practice | Provides clear and correct directions<br><br>Unguided practice is completed without teacher or peer assistance | *All items in one **and** the items below.*<br><br>Sufficient number of items<br><br>Allows for options for demonstrating learning<br><br>Involves learners in monitoring and/or recording progress |

### B8.  Promotes active engagement

**Critical Element:**
All learners are provided sufficient opportunities to respond (OTRs)

| 0 | 1 | 2 |
|---|---|---|
| Does not provide all learners with opportunities to respond | All learners are provided sufficient opportunities to respond (OTRs) | *All items in one **and** the items below.*<br><br>Sufficient variety of response strategies<br><br>Consistently uses a lively pace to maximize instructional time<br><br>Process-oriented prompting and questioning when needed |

# Direct Observation Tool

| Student Teacher Interactions | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Teacher Demonstration/ Prompt | | | | | | | | | | | | | | | | | | | | | | | | | |
| Practice Opportunity (correct/error) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Appropriate error correction procedure | | | | | | | | | | | | | | | | | | | | | | | | | |
| Provided follow up practice | | | | | | | | | | | | | | | | | | | | | | | | | |
| Provided affirmation or another error correction | | | | | | | | | | | | | | | | | | | | | | | | | |

Start time_____ Stop Time _____

# Kyena, I think it would be great to teach participants how to use the instrument, at least the interval part

- Great idea – Do you want me to find some videos to use as training to learn the Student / Teacher Interaction section of the tool

# Treasure Hunt (20 minutes)

- How could you use the HLP videos to implement Stage 2?

- How could you use the information in this PLO to teach candidates to provide feedback to k-12 students?

- Identify two PLOs that could be combined with teaching candidates about performance feedback?

- How could you use this PLO in your program to improve candidate's use of the identified HLPs or other HLPs?

- Be ready to share

# Lessons Learned in Teaching Candidates "Performance Feedback"

- Most difficult task in this PLO is getting candidates past the idea that _critical_ performance feedback is not friendly.
  - Only providing praise and affirmation does not improve practice when there are obviously errors.

- Best outcome: candidates look at _PRACTICE_ more critically. Their view changes on "successful lesson"
  - They are now looking at:
    - HLPs as a vital component of teaching and _not just finishing the lesson plan_
    - Monitoring student responses in relation to the objective is important

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# Candidate Take-Aways

This really was truly a culminating experience; using skills we learned in class, collaborating with a peer, and then reflecting on and discussing our decisions.
~ Peter

Project TEAM was the most beneficial, interactive, and productive experience I've had in my undergrad career.
~ Lexie

# 5 Minute Stretch

# PLOs not addressed today

- Microteaching, simulated interactions and mixed reality simulations are similar in structure

- Structured video analysis

- Lesson study

# Structured Video Analysis

- Involves candidates either observing a video of their instruction or that of another candidate or practicing teacher. The purpose of this PLO is to analyze and reflect on instruction for the purpose of improving implementation of a specific practice and assessing its influence on student learning.

# MCDONALD'S Learning Cycle

Before entering the cycle, you have to develop knowledge of the HLP



Analyze and revise

Understand

High Leverage Practices

Enact with students

Plan and rehearse
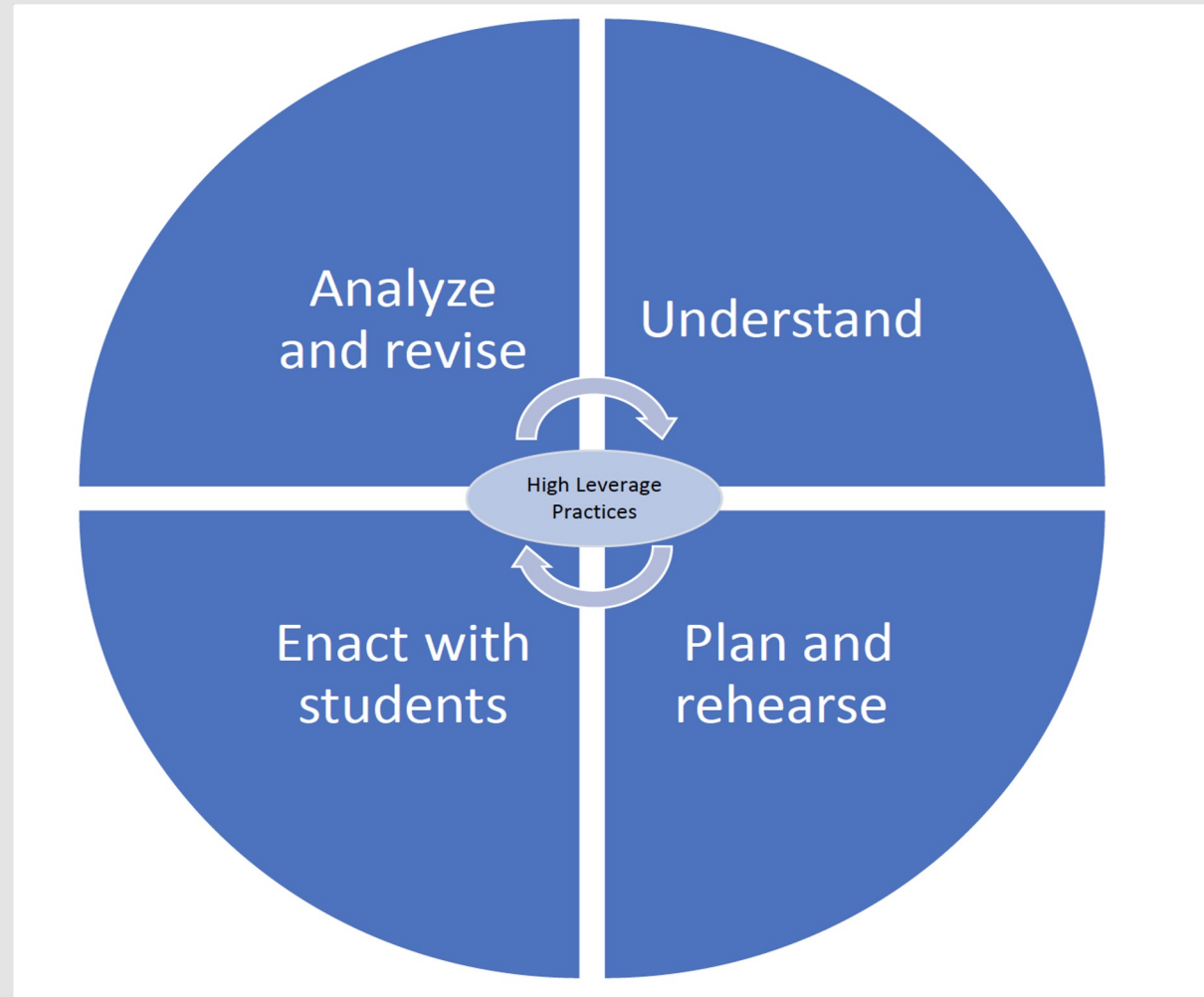
# Lesson Study

- A collaborative practice-based approach to learning that can be used to improve teachers' and teacher candidates' thoughtful implementation of high leverage practices (HLPs). LS engages preservice teachers and/or practicing teachers in a "cyclical process of collaborative planning, enactment and observation of instruction, and reflection within small peer groups" (Roberts et al., 2017, p. 238). Strong focus on how students are learning.

# MCDONALD'S Learning Cycle

Before entering the cycle, you have to develop knowledge of the HLP

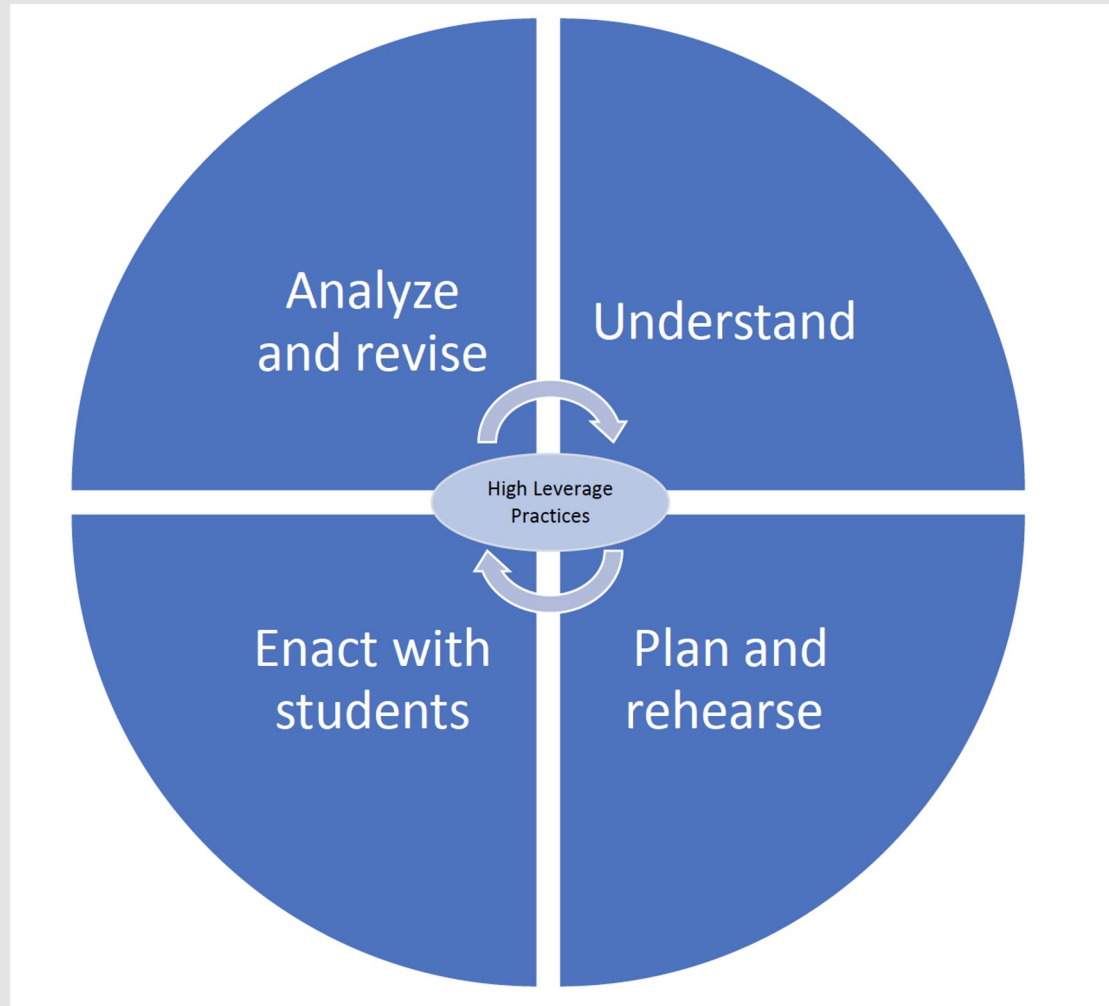- I wondered about doing a treasure hunt with Lesson study. It is a very complex and information packed PLO

- Take a look at Part 1 & 2 at https://ceedar.education.ufl.edu/plos/

# Scaffolded Sequence of PLOs

ᛉ Develop understanding of an HLP by watching video models and using structured video analysis

ᛉ Plan, rehearse, enact, and analyze/reflect using microteaching, mixed reality simulations, and/or simulated interactions (combine with performance feedback/structured video analysis)

ᛉ Lesson study (combine with performance feedback/structured video analysis)

# Analyzing preparation programs

⅄ Go to ceedar.org

⅄ Go to Resources and Tools – top right of screen

⅄ Go to Educator Preparation Resources

⅄ Click on Reports and Briefs

⅄ Click on Learning to Teach

⅄ Download MS version of the Rubric

| Quality Indicators | | | |
|---|---|---|---|
| | **Low Quality** | **Medium Quality** | **High Quality** |
| **Instructions:** To what extent are practice-based approaches, as defined by the three essential features outlined in this table, reflected across the duration of a student's preparation experience? | There is no evidence that the approach is integrated within and across coursework and field experiences. Further examination of course syllabi may be warranted. | There is some evidence that the approach is integrated within and across coursework and field experiences. Further examination of course syllabi may be warranted. | There is strong evidence that the approach is fully integrated across coursework and field experiences. Further examination of course syllabi may not be warranted. |
| **Approach** | **Questions to Consider** | | |
| **Focus**<br><br>**Description:** Critical knowledge and skills essential to effective teaching are targeted across practice-based opportunities, coursework, and field experiences. | ■ Have the teacher education faculty identified critical content and pedagogical practices as reflected in teacher standards, and have they reached a consensus on common expectations of instructional practice?<br><br>■ Are there demonstrated through-lines in instructional expectations across coursework and field experiences that are scaffolded to build upon content knowledge and skill level?<br><br>■ Are the expectations of practice grounded in evidence, and do they reflect practices for a broad range of students (e.g., typically developing learners, students with disabilities, English learners)?<br><br>■ Do the identified content and pedagogical practices support candidate capacity to operate effectively within a Multi-Tiered Systems of Support (MTSS) framework? | | |

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| Quality Indicators (continued) | | | Low Quality | Medium Quality | High Quality |
|---|---|---|---|---|---|
| **Instructions:** To what extent are practice-based approaches, as defined by the three essential features outlined in this table, reflected across the duration of a student's preparation experience? | | | There is no evidence that the approach is integrated within and across coursework and field experiences. Further examination of course syllabi may be warranted. | There is some evidence that the approach is integrated within and across coursework and field experiences. Further examination of course syllabi may be warranted. | There is strong evidence that the approach is fully integrated across coursework and field experiences. Further examination of course syllabi may not be warranted. |
| **Approach** | **Questions to Consider** | | | | |
| **Duration**<br><br>**Description**: Candidates are offered sufficient opportunities to deepen their knowledge and to hone their practice across the program. | ■ Has sufficient time been built into each course to offer candidates the opportunities they need to apply what they have learned?<br><br>■ Has sufficient time been built into the program—including in coursework and field experiences—to offer candidates the opportunities they need to apply what they have learned? | | | | |
| **Coherence**<br><br>**Description:** High-quality and highly structured, practice-based opportunities are coordinated across the program. | ■ To what extent are opportunities to practice aligned with and coordinated across the breadth of the program, thus maintaining the through-line of expectations in content and pedagogical knowledge?<br><br>■ To what extent does the program's expectations of practice (content and pedagogical knowledge) align to local district needs and to expectations of practice in field-based settings (e.g., aligned observation rubrics, training for cooperating teachers)? | | | | |

# Let's work through Kate's example

- Assume that the microteaching PLO is the only opportunity provided before students participate in their internship

- Assume that candidates are expected to apply explicit instruction in internship and university supervisors provide feedback regarding their attempts using a structured protocol

- Discuss at your table how you would score Focus, Duration, and Coherence

| | | |
|---|---|---|
| **Modeling (M)** | Demonstration of how to design, enact, and evaluate instruction is provided to candidates through multiples means (e.g., faculty or peer demonstration, videos). | ▪ To what extent do teacher educators model effective strategies and routines for teacher candidates?<br>▪ What opportunities are candidates provided to observe and analyze expert teachers participating in curriculum planning, teaching, collaborative data analysis, and analysis of instruction? |
| **Spaced Learning (SP)** | Candidates are provided sustained and repeated opportunities to practice knowledge and skills acquired in coursework. Opportunities are scaffolded to deepen knowledge and skills over time. | ▪ To what extent are practice-based opportunities provided immediately after knowledge and skills have been acquired?<br>▪ To what extent does the program offer multiple, practice-based opportunities to practice skills? How well are these practice-based opportunities scaffolded to deepen expertise over time? |
| **Varied Learning Opportunities (V)** | Candidates are provided practice-based opportunities in which they are expected to employ strategies in varying contexts, with a diverse range of students, and under different leadership support. | ▪ To what extent are candidates offered practice-based opportunities that vary in context (e.g. service delivery models, school demographics), student populations, and under different leadership support? |
| **Coaching and Feedback (C)** | Practice-based opportunities integrate explicit coaching and feedback for candidates regarding their practice and provide them with the means for improvement. | ▪ Have coaching and feedback been established as an expectation within practice-based opportunities across coursework and field experiences?<br>▪ Has training been provided for personnel who are expected to provide coaching and feedback?<br>▪ Have processes been established (e.g., feedback guidance and protocols) for use within practice-based opportunities?<br>▪ Do candidates gain practice in providing coaching and feedback within coursework and field experiences? |
| **Analyzing and Reflecting (A)** | Practice-based opportunities establish expectations and processes for candidates to analyze and reflect upon their practice, their impact on student learning, and any necessary modifications. | ▪ Is there a structure in place for engaging candidates in analysis and reflection and for adapting and modifying practice accordingly?<br>▪ Are candidates provided opportunities to collaboratively analyze student learning data and to use these findings to revise processes, curriculum, and instruction?<br>▪ Is there a structure in place to prompt and target candidate reflection on specific elements of evidence-based or high-leverage instructional practices? |
| **Scaffolding (S)** | Candidates are provided with guidance and supports for improving practice, both of which are incrementally removed to promote independence and foster the development of expertise over time. | ▪ Are candidates provided with more supports in the initial stages of their program, and are supports gradually removed as candidates progress and expertise is cultivated?<br>▪ Is the program designed to gradually increase candidates' exposure to complex content, context, and student populations? |

Page 11

| Course/Field Experience | Essential Features | | | | | | Integration Level | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Modeling | Spaced | Varied | Coaching | Analysis | Scaffolding | There is no evidence of practice-based opportunities within this course/field experience. | This course/field experience includes practice-based opportunities that include 1–2 essential features. | This course/field experience includes practice-based opportunities that include 3–4 essential features. | This course/field experience includes practice-based opportunities that fully integrate 5–6 of the essential features. |
| Classroom & Behavior Management 101: Virtual Classroom Experience | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ |
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# Back to Kate's example of Microteaching

- At your table, use the rubric to analyze the PLO provided by Kate
- Be ready to share

# Your Turn (15 minutes)

- Analyze your program using the rubric

- If you do not teach in a program yet, join with someone who is and discuss their program
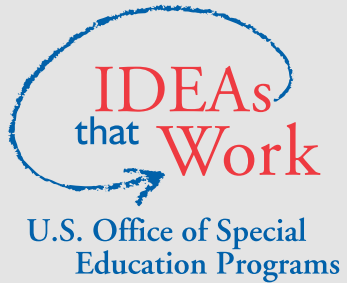
- Be ready to share the insights you gained

# Next Steps: At your table discuss

- What ideas would you like to implement when you return?
- What three actions will you take to improve use of PLOs in your programs?
- What supports will you need?
- How will you secure those supports?
- Jot your ideas down in the padlet and we will discuss

bit.ly/3ZDhllK

# Disclaimer

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