

Using Lesson Study to Prepare Preservice Educators

Amber Benedict, PhD

Carly Roberts, PhD





HLP of Critical Analysis

***As reflective practitioners,
teachers are also continuously analyzing the
impact and effectiveness of their own
instruction.***



Assessment HLP 6: Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.



- Once special education teachers develop instructional goals, they evaluate and make ongoing adjustments to students' instructional programs. Once instruction and other supports are designed and implemented, special education teachers have the skill to manage and engage in ongoing data collection using curriculum-based measures, informal classroom assessments, observations of student performance and behavior, selfassessment of classroom instruction, and discussions with key stakeholders (students, families, and other professionals). **Teachers study their practice to improve student learning, validate reasoned hypotheses about salient instructional features, and enhance instructional decision-making. Effective teachers retain, reuse, and extend practices that improve student learning and adjust or discard those that do not.**

McLeskey, J. & Brownell, M. (2015). *High leverage practices and teacher preparation in special education* (Document No. PR-1).

Retrieved from [The CEEDAR Center Website](#)



But how do
we teach
teachers to
do this?



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

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.



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.





Practice-Based Approaches to Teaching Critical Analysis



PRACTICE-BASED EXAMPLES

Microteaching

Case-Based Instruction

Virtual Simulations
and Lab-Like
Experiences

Coursework-
Aligned, Field-
Based Experiences

Video Analysis

Tutoring

Lesson Study

Coaching

What is Lesson Study?

- A mechanism that can help facilitate the transfer of knowledge to practice
 - A collaborative planning, teaching, observational, and analytic process typically used with inservice teachers (Lewis, Perry, & Murata, 2006; Roberts, Benedict, Tandy, & Kim 2017)
 - Designed to deepen teachers' knowledge, promote more substantive analysis of instruction, and improve the quality of teachers' instructional practices

Traditional Lesson Study Cycle

Phase 1: Develop student learning goals based on curriculum

Phase 2:
Collaboratively plan a research lesson with data collection plan

Phase 3:
One person teaches lesson while peers observe and take data

Phase 4: Share data from lesson, analyze, and reflect to inform next cycle

From Lewis et al. (2006)

Purpose of Lesson Study

- To help teachers design and deliver high-quality instruction and to improve student learning gains, through:
 - A collaborative, structured lesson planning process
 - Critical analysis of the relationship between teacher practices and student learning
 - Structured opportunities to deliver and receive peer feedback

(Roberts, Benedict, Patish, & Stewart, 2016)

Outcomes in the Preservice Educator Lesson Study Research

- Collaboration skills (Bjuland & Mosvold, 2015)
- Perceptions of the LS process (Carrier, 2011; Chassels & Melville, 2009)
- Improved lesson planning (Cohan & Honigsfeld, 2006)
- Delivery of practice (Cohan & Honigsfeld, 2006)
- Pedagogical content knowledge (Fernandez, 2005; Ganesh & Matteson, 2005; Leavy, 2010; Parks, 2008)
- Reflective practices (Galina & Kostas, 2014; Myers, 2012)

Using Lesson Study with Preservice Educators

- Embed into teacher education program
 - Methods Class + Field Experiences
- Connect to course credit/grades
- Tie to specific evidence-based practices (EBPs) taught in the program and/or course
- Expanded lesson study cycle with opportunity for feedback and re-teaching

Instructor Preparation for Lesson Study

- Inform cooperating teachers and supervisors about the goals, procedures, and expectations for the lesson study process
- Identify EBPs to be taught in the course
- Put preservice educators into LS groups of 2-4 students
- Communicate expectations regarding video consent with preservice educators
- Ensure preservice educators know how to upload videos to the course platform

Traditional Lesson Study Cycle

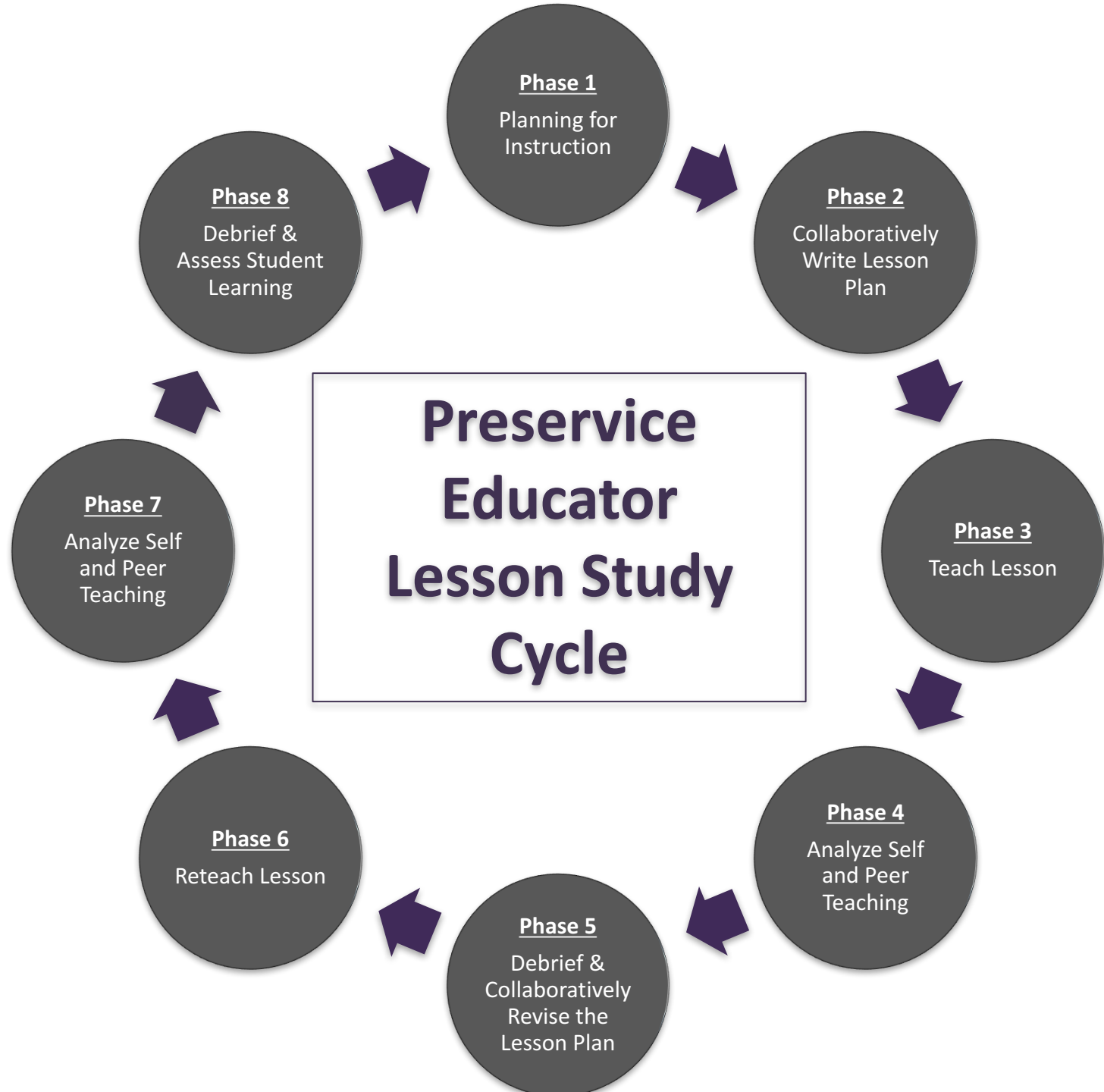
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Resources

- Please go to page E-1 in your Developing Quality Fieldwork Booklet (in your conference bag)
- Downloadable sample forms can be accessed here:
https://www.dropbox.com/sh/wq89tiuoom5t03j/AADhJM72OIbv2QzCRxFjeIJDa?dl=0&preview=9_29_17+FINAL+CEEDAR+Presentation+AEB.pdf

Case Study: Summer & KK

- **Summer**

- 1st year MEd student in Special Education focusing on teaching students with moderate to severe disabilities (2 year program)
- Working in a transition program for 18-21 year olds with moderate to severe disabilities

- **KK**

- 18 year old female with ASD and Pica
- Receives instruction in classroom 60% of the time and instruction in the community 40% of the time
- Goals related to functional communication, behavior, independence, safety skills

Phase 1: Planning for Instruction

- **In Class**

- Preservice educators identify their target K-12 student for the project
- LS teams identify their focus/topic for the lesson using the *Lesson Study Topic Selection* handout
- LS teams review K-12 student data and goals

- **Out of Class**

- Preservice educators complete *Planning for Instruction Commentary* assignment
- Preservice educators secure/confirm video permissions

Sample of Planning for Instruction Commentary

KK is an 18-year-old first year Transition student at the [REDACTED]. She is a Caucasian, native English speaker diagnosed with Autism and Pica. She is punctual and well-dressed and enjoys coming to school. Additionally, she enjoys bowling, shopping, cooking, and camping, and is good at following directions, navigating her iPad, and typing. KK receives instruction in the classroom approximately 60% of the time and receives instruction in the community approximately 40% of the time. Her community-based instruction mostly occurs on shopping trips to QFC (1x per week), work shifts at Bellevue Youth Theatre (2x per week), walking the track at Bellevue Family YMCA (2x per week), and a group outing with her peers to a location of the student's choice (1x per week).

KK is experiencing struggles in functional academics (reading, writing, and math) as well as in adaptive skills, communication, and behavior. Her tolerance for work tasks ranges from approximately 5-15 minutes, though she has a substantially higher tolerance for group work and group activities (up to 1 hour). The teacher noted that this tolerance for group work is relatively new. KK's receptive communication is much stronger than her expressive communication, though she can use her iPad to

Phase 2: Collaboratively Write Lesson Plan

- **In Class**

- LS teams collaboratively write lesson plan using the previously identified topic and goals and *Lesson Plan Template*

- **Out of Class**

- Preservice educators edit and finalize the lesson plans to be used with their target K-12 learner and upload their final lesson plan for grading and feedback

Sample of Collaboratively Planned Lesson Plan

Review (*Think: what academic knowledge and concepts learners must be familiar with to be successful in the instructional plan?*):

In order to participate successfully in this lesson plan, a learner must be familiar with the concept of matching two separate items to indicate a connection between those items. A learner must also be able to recognize numbers, and be able to either read or recognize family member names as site words

Explicit Instruction (*Think: what will you say to students as you teach? What prompts will you use?*):

The teacher will begin instruction with the prompt, "We are going to work on our reading now." The teacher will use a system of Least-to-Most prompting while advancing through the session, starting with a gestural prompt and ending with a controlling full physical prompt in the event of repeated errors. KK will be verbally reinforced for every correct answer with praise such as "Nice job, that is dad's phone number" or "Great work! You pointed to mom's last name."

Modelling (*Think: how will you demonstrate the target skill to the students?*):

The student will be reminded of the instructional procedure with a one-trial review process, during which time a 0-second time delay will be used. For this trial, a 'category' card and three answer cards (one correct answer and two distractors) will be placed on the table. The teacher will point to the category card and read it aloud, then immediately point to the correct answer and read it aloud. After reading the correct answer aloud, the teacher will ask KK to repeat the answer. For example:

	<p>Explicitly state instructional objectives with measurable criteria:</p> <p>When presented with a color coded flash card directing KK to identify the first name, last name, or telephone number of her mother, father, or grandmother, KK will be able to correctly identify the required information from a set of three color coded flash cards (one correct answer and two distractors) on 3 out of 9 opportunities.</p>	<p>Rationale: The objective of this lesson plan serves as a stepping stone toward KK's IEP goal, since data taken from the beginning of the school year indicate that simply practicing with the template has <i>not</i> helped KK to make progress toward her goal. Meeting the criteria for this goal will bring her closer to achieving her IEP goal in a timely manner. ♥</p>
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Phase 3: Teach the Lesson

- **In Class**
 - None
- **Out of Class**
 - Preservice educators teach and video record their lesson in their field placement and upload to course platform for peers and instructor to view

Phase 4: Self and Peer Analysis of Teaching (*Round 1*)

- **In Class**

- Teach students how to analyze instruction and engage in productive talk prior to analysis assignment; model using lesson study template
- Sample Strategy: TEACH
 - Teach the learning, Examine the evidence, Analyze what teacher behaviors prompt students' learning, Critique the quality of the lesson, How will you proceed?

- **Out of Class**

- Preservice educators view their video and their peer's video and complete the *Data Collection Worksheet* and *Summary Reflection of Teaching* for BOTH videos.
- Preservice educators follow guidelines for assignment outlined in the *Phase 4: Self and Peer Teaching Analysis and Reflection* handout

Sample of Self & Peer Teaching Analysis and Reflection (Round 1)

Lesson Time	Lesson Step/What is happening/Practice being used	Student behaviors that demonstrate the learning we intend	Student behaviors that demonstrate something other than the learning we intend
1:00	Referencing schedule/setting up for lesson	"What's next?" (pointing to schedule) Correctly matching color cards	Demanding lunch
2:00	Color matching – first/last name	Color matching	Tries to reach for other cards on the table that aren't choices
3:00	Color matching – telephone number	Helps to read the end	
4:00	Color matching – telephone number	Helps to read the end	
5:00	Color matching – telephone number Ending lesson – referenced back to schedule	Goes back to desk wh	
6:00	Earns tokens/given choice in making schedule		
7:00	Video #2 Starting lesson Calming strategies	Correctly matches col Helps to read the rest	
8:00	Color matching telephone numbers Behavior-specific praise Clear expectations (quiet mouth/calm body) Given choices	Correctly matching co Helps to read the ans	

There were a few moments between the two videos where I noticed room for improvement, most of which centered on materials-management. In the first video in particular, I spent an unnecessarily long time arranging each flashcard set, which likely contributed to the student's agitation. In future iterations of the lesson I could do a better job of pre-arranging the flashcards so they are easier to grab and set out in front of the student. In between minutes 2:00 and 3:00 of the first video, I also noticed

that the student attempted to reach for a flashcard that was *not* in the set she was intended to be looking at. This tells me that my poor materials-management was confusing to the student, who obviously didn't fully understand what her options were. Given this observation, I think it's likely that

better materials-management will also help promote response accuracy. Finally, I think that using a constant-time-delay procedure in the future would be more effective for instructing this lesson than the least-to-most prompting system. Because this activity is not a very physical or kinesthetic learning objective, and because previous experience with the student shows me that repeated error correction can cause escalation, I think that using a least-to-most prompting system that ends with full physical prompting (as per my lesson plan) has a greater chance of escalating the student *and* has the potential to be unnecessarily intrusive. The constant-time-delay procedure should also help to expedite the

lesson, which would also help promote student engagement since the student doesn't like waiting.

Phase 5: Debrief & Collaboratively Revise the Lesson Plan

- **In Class**

- LS teams debrief lesson plan implementation and share suggestions for future lessons
- LS teams revise their original lesson plan using the *Lesson Plan Template*
- LS teams complete the *Next Steps* worksheet

- **Out of Class**

- Preservice educators edit and finalize the revised lesson plans to be used with their target K-12 learner and upload their final lesson plan for grading and feedback

Sample of Next Steps Worksheet

Re-teaching: (if extending please skip to extending)

1. What major changes do you plan on making in the lesson plan?

The biggest change I plan on making to this lesson plan is switching from a least-to-most prompting system to a constant time delay. As I noted in my Peer and Self Analysis reflection, "Because this activity is not a very physical or kinesthetic learning objective, and because previous experience with the student shows me that repeated error correction can cause escalation, I think that using a least-to-most prompting system that ends with full physical prompting (as per my lesson plan) has a greater chance of escalating the student *and* has the potential to be unnecessarily intrusive. The constant-time-delay procedure should also help to expedite the lesson, which would also help promote student engagement since the student doesn't like waiting."

I am also going to work on improving my materials management.

2. Are there elements/procedures that you will leave out in the revised plan?

All of the fundamental elements will remain in the revised lesson plan; however, the least-to-most prompting system will be replaced with CTD. This will necessitate a change the error correction procedure

3. Are there elements/procedures that you will add into the revised plan?

No, I am only making changes to existing elements.

4. Will you make any changes to the materials?

Though I won't be changing the physical materials, I will work on pre-arranging them so they can be presented more quickly and easily

Phase 6: Re-teaching the Lesson

- **In Class**
 - None
- **Out of Class**
 - Preservice educators teach and video record their revised lesson in their field placement and upload to course platform for peers and instructor to view

Phase 7: Self and Peer Analysis of Teaching (Round 2)

- **In Class**
 - None
- **Out of Class**
 - Preservice educators view their video and their peer's video and complete the *Data Collection Worksheet* and *Summary Reflection of Teaching* for BOTH videos.
 - Preservice educators follow guidelines for assignment outlined in the *Phase 4: Self and Peer Teaching Analysis and Reflection* handout.

Sample of Self & Peer Teaching Analysis and Reflection (Round 2)

Lesson Study Group #: 1

Circle if self or peer analysis: self



Lesson Time	Lesson Step/What is happening/Practice being used	Student behaviors that demonstrate the learning we intend	Student behaviors that demonstrate something other than the learning we intend
1:00	Student and teacher working on writing (writing is a calming activity for the student and was chosen to prepare her for the transition)	Student is actively engaged in the writing task (offering words that she would like to use in sentences) and maintains a calm demeanor	None
2:00	Student and teacher continue to work on writing task (see above for rationale)	Student continues to be actively engaged in the writing task and maintains a calm demeanor	None
3:00	Teacher begins to prep student for upcoming transition. ("After these two sentences, we're going to work on mom and dad cards.")	Student continues to be actively engaged in the writing task and maintains a calm demeanor	Student does not seem to indicate that she understands that a transition will be occurring soon
4:00	Teacher writes a new visual schedule for the student introducing the next three activities (including the planned lesson)	Student watches very intently as teacher writes out the visual schedule	None
5:00	Teacher and student transition to a new work area and begin the task. Start with sequence involving emergency contact first names on a 0-second time delay	Student physically manipulates cards to indicate correct matches as teacher presents each sequence on a 0-second time delay	Student does not clearly articulate the first name of her mother, father, or grandmother in response to the teacher's prompting
6:00	Teacher and student begin sequence involving emergency telephone numbers on a 0-second time delay	Student is actively and intently looking at the cards. On the third set, KK physically points to the correct card match.	On the first set, student does not manipulate the cards or make a vocalization to indicate that she recognizes the match before the teacher takes the set away. On the second set, teacher uses full physical prompting to guide student to the correct match. Near the end of the minute, the student begins to "whine." T
7:00	Teacher and student run through	Student uses her voice to indicate the correct match for	Student does not make any vocalizations or manipulate any

Phase 8: Debrief & Assess Student Learning

- **In Class**

- LS teams debrief the revised lesson plan implementation and share suggestions for future lessons.
- LS teams share highlights from their *Summary Reflection of Teaching*.

- **Out of Class**

- Preservice educators complete the *Assessing Learning and Final Commentary* Assignment.

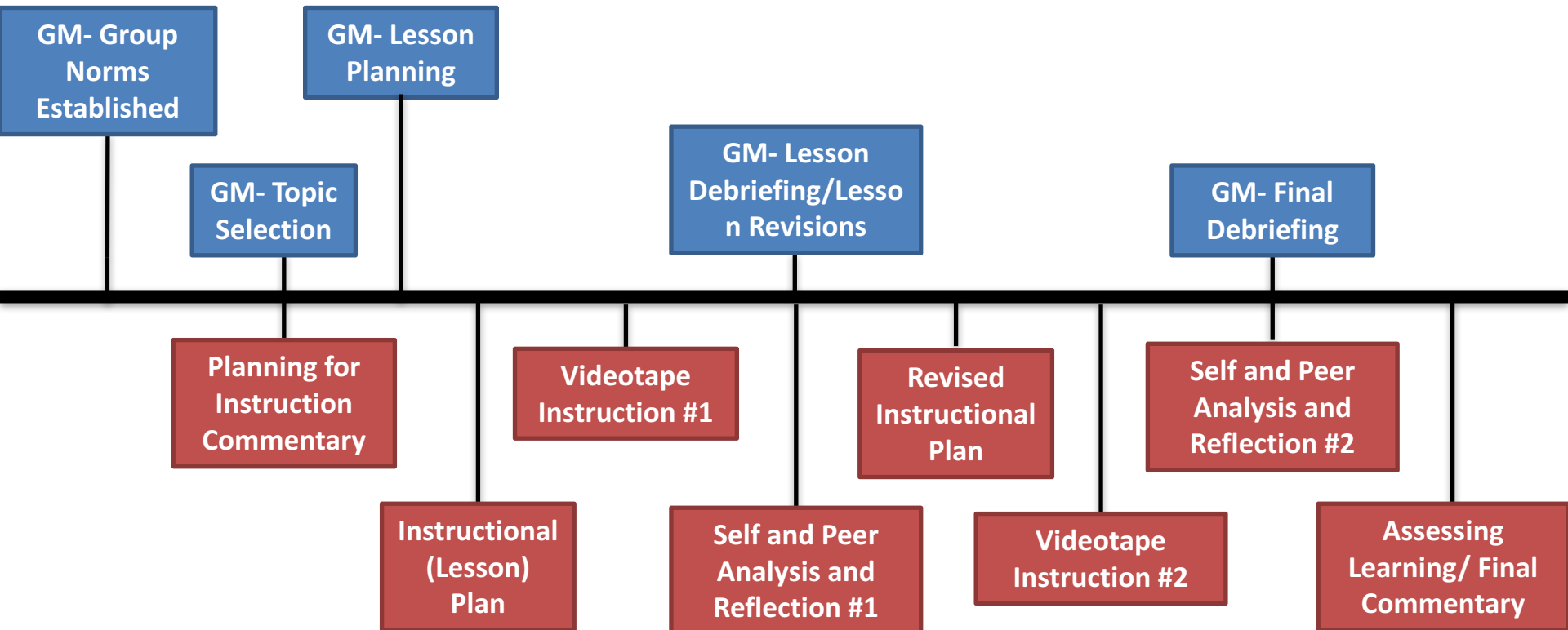
Sample of Summary Reflection of Teaching

A review of the data sheets from my first instructional session with my target learner and my second instructional session with my target learner immediately revealed some significant progress – for both my learner’s outcomes *and* my instructional methodologies. In the first video, the student exhibited screaming or yelling behavior in 50% of one-minute intervals. As I know this student fairly well (we’ve been working one-on-one for the majority of every school day since September), I know that her agitation is exacerbated by lack of engagement. Like many people, she becomes easily frustrated when she has to wait and when she is unsure of her expectations. In the first video I really struggled with my materials management, which led to increased waiting periods for the student, which led to increased agitation and disengagement. In contrast, during the second video, the student exhibited screaming or yelling behavior in only 36% of one-minute intervals. I made a few substantial changes between the first and second video that I think contributed to this decrease. First, before the second video I pre-arranged the flash cards into more logical groupings which allowed the lesson to move at a quicker pace. In the first video, I had pre-arranged all of the ‘grandma’ cards together, all of the ‘dad’ cards together, and all of the ‘mom’ cards together. However, I realized after the first lesson that prearranging the cards in this matter didn’t make sense, since I was presenting them to her based on categories (such as ‘telephone

In-Class Activities

Out of Class Assignments

Timeline of LS Phases & Activities



Clarification of Terms:
GM- Group Meeting

Platforms

- Blackboard
- Google Drive
- Canvas
- Moodle
- Torsh

The screenshot displays the Canvas LMS interface for a course titled "EDSPE 501 A". On the left is a purple sidebar with navigation links: Account, Dashboard, Courses, Calendar, Inbox (with a notification badge of 58), Commons, and Help. The main content area is white and includes a top navigation bar with a hamburger menu icon and the course name. Below this is a sub-header "Autumn 2017". A central menu lists course components: Home (highlighted in blue), Announcements, Assignments, Discussions, Grades, People, Pages, Files, Syllabus, Outcomes, Quizzes, Modules, Conferences, and Collaborations. The "Recent Activity in EDSPE 501 A" section features a blue box with an information icon stating "No Recent Messages" and explaining that messages will appear once participation begins. Below this is the "Course Status" section, showing "Unpublished" in a red box and a "Publish" button. A list of actions follows: "Import from Commons", "Choose Home Page", "Course Setup Checklist", and "New Announcement". The "Coming Up" section at the bottom indicates "Nothing for the next week" and includes a "View Calendar" link with a calendar icon.

W
canvas

Account

Dashboard

Courses

Calendar

Inbox 58

Commons

Help

EDSPE 501 A

Autumn 2017

Home

Announcements

Assignments

Discussions

Grades

People

Pages

Files

Syllabus

Outcomes

Quizzes

Modules

Conferences

Collaborations

Recent Activity in EDSPE 501 A

No Recent Messages You don't have any messages to show in your stream yet. Once you begin participating in your courses you'll see this stream fill up with messages from discussions, grading updates, private messages between you and other users, etc.

Course Status

Unpublished Publish

Import from Commons

Choose Home Page

Course Setup Checklist

New Announcement

Coming Up

Nothing for the next week

View Calendar

Tips & Tricks

- Provide explicit instruction around technology
- Determine the appropriate length of instructional video and stick to it
- Ensure students have the appropriate video permissions
- Embed work time in class sessions
- Have students use track changes and/or google docs to note updates in revised lesson and provide feedback
- Large, active learning style classrooms are the easiest space to conduct this work in

Questions

- Contact Information
 - Amber Benedict, 319-830-9548, aebenedict@coe.ufl.edu
 - Carly Roberts, 360-320-2165, carober1@uw.edu