**Professional Development Agenda**

**Day Three**

**9:00-9:30 Introduction to Day 3:**

Materials: KWLR Graphic Organizer, powerpoint, and four corners labeled.

* We will begin by reviewing online resources and how to access Weebly website. The Day 3 Learning Goals and Objectives will be explained and reviewed:

Day Three Objectives:

* Assessment:
1. Attendees will be able to identify the difference between formative assessment and summative assessment.
2. Attendees will implement formative assessment strategies when planning a unit.
3. When given a math problem, attendees will be able to differentiate by tiering the math problem for diverse learners.
* Technology:
1. Attendees will be able to explain how technology is used to support student performance.
2. Attendees will demonstrate technology knowledge by accessing resources with the use of an iPad.
* Unit Planning:
1. Attendees will demonstrate Unit Planning knowledge by following the Guiding Question Process for Planning Diagram.
2. Attendees will demonstrate knowledge of differentiating by unit planning with their co-teachers using rubrics/graphic organizers provided.
3. Attendees will receive and give feedback to peers unit planning using 3-2-1 Feedback form.
* The participants will begin with KWLR Sheet that assesses prior-knowledge about Assessment. They will access prior-knowledge while responding to the following questions:“What type of assessments do you use in your classroom? How often do you assess student understanding? What do you want to learn about assessment?”
* Remind participants of the group norms used in today’s professional Development.
* Timed RoundRobin for groups to share out on reflections of background knowledge.
* Then the attendees will play Four Corners: Each participant moves to the corner that reflects their current assessment status. The corners are as follows. These corner descriptions are placed on the powerpoint.

 Corners: A. I persistently use both summative and formative assessment daily and frequently throughout my lesson. In addition, I use the data collected to shape my lesson for my students needs. B. I sometimes use both summative and formative assessment daily throughout my lessons. I look at the data often, but feel pressured to keep up with the pace of the curriculum when lesson planning and do not always get to re-teach. C. I am not sure if I use summative or formative assessment techniques. I rarely find time to re-teach topics. D. My main assessments are unit tests and I would like to learn more on how to effectively use assessment to shape my instruction.

**9:30-10:30 Segment 1: Importance of Assessment**

Materials: Powerpoint, weebly website, *Developing Mathematical Thinking with Effective Questions* handout, *Constructing Complexity for Differentiated Learning* article, sticky notes, and youtube videos.

* This segment will begin with defining assessment and discussing examples.
* Mathematical barriers are revisited before discussion is discussed further.
* Types of assessment that will be covered are as follows: Formative and Summative are defined
* Importance of Mathematical Proficiency is tied to Assessment
* Strategies for Effective Formative Assessment are Listed

**10:30-12:00 Formative Assessment Strategies**

* Goal Setting strategy explaining and practice turning in 5th grade Grade Level Content Expectation (State of MI) into an “I can” statement with partners.
* Red, Yellow, and Green assessment explained. It is discussed and explained out to use and graphic organizer.
* Observations and Effective Questioning Strategy Explained: How to differentiate questions and reflecting on Developing Mathematical Thinking with Effective Questions handout is discussed and reviewed.
* Jigsaw: Constructing Complexity for Differentiated Learning article is read and jigsaw out into groups for sharing (participants only read part of article and share out to other group members).
* Practice differentiating a math question in groups of four, then one group member travels and share responses with different group (travel and share technique).
* Peer Assessments: How to integrate into cooperative learning groups
* One on One Conferencing: Tips and effective questioning.
* Assessment tied to Grading: How and when to grade is discussed (important of grading).
* Cooperative Learning Group Formative Assessments Examples are defined and explained ( RoundRobin Write and Showdown techniques).
* Exit Slip Strategy is discussed.
* Thumbs Up Strategy: Modeled with Math Number Strings game.
* When to use Assessment: Watch youtube video of break dancers and take notes on peer assessment taking place. Then attendees will share out the assessment that was observed: http://www.youtube.com/watch?v=3HTbqAoeHxw
* Watch video on formative assessment taking place in a classroom: http://www.youtube.com/watch?v=rL54bfmZPzY
* Difficulties with assessment: Accommodation tips for different learning needs.
* Co-Teaching means Co-Assessing!
* Exit Slip: Participants jot down an “ah-ha” moment before leaving for lunch and place on door.

**12:00-1:00**

**Lunch Break**

**1:00-1:45 Segment 2: Technology**

Materials: Youtube, pen, marker, large sheets of paper for Table Top Twitter, and music.

* Review goals and objectives.
* Welcome back activity: Questions about Professional Development about read aloud. Participants are given think time about reflecting on these questions. The questions are as follows and are tied closing to the major themes of the professional development: What are barriers struggling learners face in math?
	+ List examples of Formative Assessment:
	+ List example of Summative Assessment:
	+ What technology do I already use?
	+ What are benefits of co-teaching?
	+ What makes co-teaching hard?
	+ What are UDL Strategies?
	+ What is RTI?
	+ How can I accommodate for gifted learners?
* Music is played and participants walk around the room. When music stops they respond in writing to questions posted about PD Topics.
* Research about Technology use in Classrooms: Six Benefits of using technology related to student performance.The benefits are as follows:
* Video on Technology in the 21st Classroom Youtube: http://www.youtube.com/watch?v=\_A-ZVCjfWf8 technology video
* Table Top Twitter about technology participants use and how to use it in the classroom.

**1:45-2:10 Segment 4: Unit Planning**

Materials: Weebly website, iPads, computer lab, Unit Planning Graphic Organizers, pens/markers, Achieving Fluency: Special Education and Mathematics by the National Council of Teachers of mathematics, and 3-2-1 rubric.

* Ipads are handed out and teachers will explore resources using iPads. Resource List is given and participants explore different links with their co-teachers to brainstorm ways to use different technologies to differentiate instruction. Resource given includes: informational articles, informational website, social media, and applications for iPads (See Weebly website for list).

**2:10-2:30 Segment 4: Unit Co-Planning**

* Rationale for planning time with co-teacher..
* Expectations for planning are discussed.
* Guiding Questions for Planning are explained in detail: Goals, Cautions, Identifying Potential Barriers, Planning and Implementing Accessibility Strategies, Evaluation Accessibility Strategies handout.
* Weebly Unit Graphic Organizers are viewed and explained on the Weebly website.

**2:30-3:30**

* Participants leave with co-teachers to computer labs to plan an upcoming unit with differentiation in mind.The participants are able to view all the unit planning graphic organizers from the weebly website and print the organizers that the find helpful. It is not required for the co-teachers to use all the organizers. The teachers can print multiple copies of one organizer.

**3:30-4:00 Unit Co-Planning Peer Feedback**

* Participants return from the computer to lab to share the unit they have planned.
* Co-teachers split and explain differentiation of their units with peers of different grade levels. Participants are in groups of six and co-teachers are not together to receive optimal feedback from peers. Peers fill out 3-2-1 Feedback Rubric.

**4:00-4:15 Closing of Professional Development**

* Using iPad, participants practice accessing the Professional Development Weebly page (a review of where they can access these resources after the professional development has ended). .
* Participants are given a copy of Achieving Fluency: Special Education and Mathematics by the National Council of Teachers of Mathematics. This book provides additional strategies not discussed in the three day Professional Development to allow participants to continue to grow in knowledge about differentiation.
* Continue the discussion on Differentiating Instruction can be continued through twitter. Hashtags# have been placed on powepoint slides to encourage participants to take their conversation online. In addition, this encourages attendees to connect professional to continue their conversations and act as resources for each other in the areas of differentiation.