| **Time, Format & Materials** | **PPT Slides** | **Description** | **Comments to Facilitator** |
| --- | --- | --- | --- |
| **10 min.**  Whole group  *Facilitator notes*  *HO 2.1*  *Provide participants with PPT handouts for note-taking* | 2  3 - 4 | **Getting Started:**   * Review HO 2.1: *Summary of the Protocols* to set some context for today’s protocol and to briefly talk about how it fits within the set of the 5 protocols. * Go over goals and agenda * Revisit parking lot of questions from last time – any that you want to address during the meeting today? (Don’t have to answer them now, but can flag ones that you hope to discuss/answer during today’s mtg.) |  |

**During the Quiz That Comes Next:**

*The point of this simulation is to raise levels of tension and discomfort, similar to those experienced by students with disabilities in similar situations, so that the team members can discuss their personal response to that discomfort. To have the desired effect, please refrain from explaining this to the team until AFTER they have finished the quiz.*

*One way this discomfort is generated is by the fact that each operation sign in the quiz has been given a different meaning.*

*Another way is for you as facilitator to let people know when they only have 10-15 seconds left (few people will have been able to complete the quiz in this time).*

| **Time, Format & Materials** | **PPT Slides** | **Description** | **Comments to Facilitator** |
| --- | --- | --- | --- |
| **10 min.**  Individually | 5 | **Understanding the Perspective of a Student with Disabilities in Math**   * Show the quiz on slide 5. Have all participants begin at the same time, and give participants no more than 1 minute to complete the quiz. | *The purpose of this “quiz” is to put individual team members into the shoes of a student with a learning disability. The experience of taking the quiz will serve as a vehicle for understanding more about what students with disabilities are confronted with when trying to learn mathematics*  *Make sure that you read the directions to the group and point out that the operation symbols have been redefined.*  ***Please note:*** *that a handout is not included with this slide, participants should copy the problems onto their paper (as students are often asked to do).* |
| Whole group | 6 | Use the questions on slide 6 to discuss team members’ reactions to the experience and their thinking about how a student with a disability would react in a similar situation. |  |
| **45 min.**  Whole group  (15 min)  *HO 2.2* | 7 - 13 | **Getting to Know Areas of Demands and Difficulties for Students with Disabilities**   * Distribute HO 2.2: *The Six* *Areas of Demands and Difficulties*. Team members can use this for reference during the PPT presentation that follows. * A SPED team member provides a short PPT presentation (slides 7-13) to introduce the 6 areas, and to emphasize the idea of attending to students’ learning strengths, not simply their difficulties. * Allow a few minutes for the team as a whole group to pose any clarifying questions to the SPED members of the team. * Point out that during the next 30 min, the team will delve deeper into two of these areas: *Language* and *Memory*. * Divide the team into two groups. One group will focus on *Language*, the other group will focus on *Memory*. | *The goal of this section is for the team to develop a general familiarity with six areas of demands and difficulties for students with disabilities who are learning mathematics, with a special focus on two of those areas: Language and Memory.*  *Make sure to point out that although it is important to attend to a student’s strengths, in this protocol, we are paying attention to areas of students’ difficulties in order to get more familiar with the nature of these difficulties.*  *During the PPT presentation, emphasize that the information given on the slides relates specifically to mathematics and not to behavior.* |
| In groups  (20 min.)  *HO 2.3*  *HO 2.4* | 14 | * Distribute HO: 2.3 *Math as a Language Spotlight* to one group and HO 2.4: *The Connection Between Memory and Learning* to the other group. * Each group individually reads their article and underlines three items that stand out. * When the sub-group is ready, discuss:   + *What are the barriers that students with this difficulty experience? What experiences have you had with this area of demand with students or with teachers?* |  |
| Whole group  (10 min.) |  | * Come back together as a whole group. Each pair shares out a thought about how they are thinking differently about either Language or Memory. |  |
| **35 min.**  Whole group  (10 min.)  *HO 2.6*  *(provided by SPED team member)* |  | **Using the IEP As a Tool for Supporting Students**   * Distribute copies of the IEP that the SPED team member has brought to the meeting. * Give the SPED member(s) of the team 10 min. to talk briefly about the IEP.  (See Special Note in Preparation section.) | *The purpose of this next section (35 min.) is to better understand how to use the IEP as a tool for supporting students with disabilities.* |
| In pairs  (10 min.) | 15 | * In pairs, discuss:   + *How can a math teacher use the IEP to plan for his/her students?*   + *What additional information on an IEP would help a mathematics teacher better serve his or her students with disabilities?* |  |
| Whole group  (15 min.) |  | * Each pair shares out 1-2 points from their conversation with the whole group. |  |
| **15 min.**  Individually  (3-5 min.) | 16 | **Wrap Up**   * Give participants time to individually write/reflect: what are some important ideas from today that you want to note for yourself? |  |
| Whole group  (10 min.) | 17  18 | * Summarize and list any outstanding questions that have not been answered yet and that are still under discussion. * Review parking lot questions and how to handle them. Will they be addressed outside these meetings, or in a subsequent meeting? * If there are any tasks to be done before the next meeting, review what those tasks are, who will take the lead on the task and when will the individual(s) attend to the task. * Review the purpose of next meeting * Clarify date, time and location of next meeting. |  |

**Resources**

*The following resources informed the development of this session and can be used to extend this work*:

* IEP Process Guide (ESE Website)
* FREE Summer PD: Professional Development Institutes (PDIs) (ESE Website)
* FREE School Year PD: MA FOCUS Academy (ESE Website)
* Resource Guide to the Massachusetts Curriculum Frameworks for Students with Disabilities (ESE Website)
* LD Online <http://www.ldonline.org/>
* Landmark School <http://www.landmarkoutreach.org/publications/spotlight/math-language>
* The Connection Between Memory and Learning <http://www.fdhkids.com/docs/connection_between_wm_and_learning.pdf>
* Allsopp, David, Kyger, Maggie, Lovin, LouAnn. Teaching Mathematics Meaningfully. Baltimore: Paul H. Brookes Publishing Company, 2007.