**IPIR** – Instructional Planning, Implementation, and Reflection *(with edTPA Preparation)*

## Part A: Context for Learning:

### About the Client

Actual Grade level: 6th

Identified Level (from testing): 3.8

Special Needs:
(If applicable, include an explicit and specific description of how you will implement accommodations/ modifications.)
ADHD – we'll be in a study room with minimal distractions
Visual/Spatial Disability (Suspected Dyscalculia) – manipulatives will be used, other accommodations will be made (see below).

## Part B: Reflection on Previous Lesson:

### Teacher Candidate Reflection

**Date of Prior Lesson:** 02/12/18

**Client Progress**

Client Response *(How did the client participate in the lesson? What was his or her disposition, interest level, behavior, etc.?)*

The client responded well to the lesson. He participated in the activities I had planned for him without complaint and without dragging his feet. He behaved well. I don't think he was very interested in the lesson, but then, it wasn't a very interesting lesson.

Progress Made Toward the Objective: *(Restate the objective from the previous lesson. Did he/she achieve the objective? Specify why/why not.)*

LP1 Objective: Given a worksheet on decimal manipulation, the student will be able to add and subtract decimals to the tenths, hundredths, and thousandths, getting 80% correct.

The student scored 80% correct without needing to correct anything. He self-corrected on 1-2 problems and I corrected him on 1 problem.

From his testing information, I expected him to need more scaffolding to get him to understand decimal manipulation, but he understood things much more quickly than I thought he would. The main issue had to do with place value concerning decimals. He frequently made the common error (ce) of adding a decimal to a whole number in this manner:

3.456
+ 7
3.463.

Once I taught him decimal addition using manipulatives (base-10 blocks) and had him add in zeros in the empty decimal places, he began to correctly add/subtract decimals. He also applied this knowledge in another area. When asked which was bigger, 3.456 or 7, he initially said 3.456 since there were more digits,

but quickly self-corrected, saying 7 was larger because you could insert zeros into the empty place value positions. Even though KeyMath3 indicated he was at a 3rd grade level, I will most likely use fourth or even fifth grade SOLs.

**Teacher Candidate Progress**

Pedagogical Reflections/Insights from Tutor: *(How do you feel <u>you</u> did at preparing the lesson, implementing the lesson, choosing effective instructional strategies, etc.)*

I did not do very well planning the lesson. There were several extenuating circumstances which prevented me from giving the first lesson the attention it needed. My testing day was delayed, my schedule conflicted with the curriculum library's, and I didn't feel the testing information was accurate. I did much better in implementing the lesson than in planning it. I stuck to my plan, adjusting as necessary after gaining a better understanding if my client. The use of manipulatives seems to be a good way to teach him. This is also supported by the literature on dyscalculia.

Amendments/plans you will make in the following lesson due to outcome of last week's lesson: *(What will you do differently to make your teaching more effective and improve your client's achievement?)*

I've had much more time to plan. I've researched the visual/spatial disability I believe my student to have and will be using that research to help plan my lesson. I will also have more time between writing my lesson and implementing it to practice teaching it.

## Part C: Planning:

# WEEKLY LESSON PLAN TEMPLATE

| Preliminary Information | |
|---|---|
| **Subject / Topic:** Mathematics | **Learning Segment Theme:** Numbers and Number Sense |

**Resources and materials required for the lesson (e.g. textbook(s), module, equipment, technology, art materials)**:

Base-10 Blocks, IP practice sheet,

**1. What are your goals for student learning and why are they appropriate for these students at this time?**

**Big Idea or Concept Being Taught - - CENTRAL FOCUS**

Manipulating decimals (multiplication)

**Rationale/Context for Learning - - JUSTIFICATION FOR YOUR PLANS**

(Why this lesson at this time, for this learner? How does it connect to testing data, previous learning or succeeding lessons?)

The adding/subtracting decimals lesson went better than expected. He picked up the skill more quickly than I thought he would. Moving on to multiplication/division of decimals seems like the next logical step. I will be testing his ability to add/subtract decimals as part of the diagnostic assessment to see if any remediation from last time needs to be done.

**Prior Knowledge and Conceptions**

(What knowledge, skills and/or academic language must client already know to be successful with this lesson?)

**Prior knowledge**:
Decimals
**Prior skills**:
Adding and Subtracting Decimals, Multiplying
**Prior academic language**:
Multiply, decimal, tenths, hundredths

**Content Standards**

State
Common Core

State:
VA SOL 5.5a
The student will estimate and determine the product and quotient of two numbers involving decimals;

CCSS:
CCSS.MATH.CONTENT.5.NBT.B.7
Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

**Learning Objective(s)**

(These must be behavioral & measurable.)

**STATEMENTS OF WHAT STUDENT WILL KNOW, UNDERSTAND, AND BE ABLE TO DO AT THE END OF THE LESSON**

(consider all three domains) – Include condition, performance, criterion

Given a worksheet on decimal multiplication, the student will be able to multiply decimals to the tenths and the hundredths, getting 12/15 correct.

**Academic Language Demands**

**Identify the language demand(s) -**
**Identify language support(s)**

**Language Demands:** The student needs to be familiar with terms having to do with multiplication and decimal. Academic language such as factor and product, decimal, and the place values tenth and hundredth are language demands.

**Language Supports:** The student will be assessed formatively throughout the lesson on his knowledge of these terms. Any term not known to him will be explained as part of the lesson.

**LU SOE Specific Lesson Requirements**

**Character Education:**
Trying new things. I can incorporate this as I will be showing him new methods to solve problems which he may have already encountered in an effort to give him more tools to help him perform in math.

**TCA Alignment:**
1. **Professional Knowledge** – I am knowledgeable of the content which I am teaching
2. **Instructional Planning** – I have planned this lesson and have given myself enough time to adequately plan and practice this lesson.
3. **Instructional Delivery** – This lesson will be delivered in a clear manner using language appropriate to the student's level of understanding.
4. **Assessment of and for Student Learning** – The student is constantly being formatively assessed throughout the lesson and is diagnostically assessed at the start of the lesson.
5. **Learning Environment** – We will be studying in a study room to accommodate the student's ADHD.
6. **Professionalism** – I will be dressed professionally and will behave professionally.
7. **Student Academic Progress –** I am documenting my student's progress and am basing my lessons on his progress.

**Social Responsibility** – I believe that my client can learn as all students can. I am making accommodations/modifications for him as needed.
**Commitment** – I am committed to my student and client. I will not cancel/postpone suddenly or frequently and will make up any missed session as stated by the course requirements.
**Reflection** – See section B above.
**Integrity** – I have not and will not violate any ethical or legal concerns.
**Professionalism** – See TCA.6 above.

**2. How will you know and document students' progress towards meeting your learning objectives?**

**Evidence and Assessment of Student Learning**
(How will you know whether your student met your learning objectives? What tools will you use to measure his/her progress? How will you provide feedback to promote student learning?)

**Diagnostic/pre-assessment(s)**:
I will ask my student questions about the previous lesson to see if he remembers what he learned and will assess his ability to multiply decimals.
Sample Problems: 1.36 + 4; 7 – 2.98; 4.1 * 9; .7*.09

**Formative assessment(s)/feedback to learner**:
I will ask my student questions throughout the lesson about certain parts of the lesson (i.e. what place value is this?). My feedback will be verbal during the lesson (i.e. I like how you rewrote the problem to make it easier to solve. Great work!). I will make sure to tell him how he is doing throughout.

**Summative assessment(s)**:
See Independent Practice below.

**Expectations for Student Learning - - STANDARDS & CRITERIA**
(Describe in detail the following levels of student performance. What will students' work look like when it exceeds expectations? When it meets expectations? When it falls below expectations? How will you communicate these expectations to students? Provide any rubrics you will use.)

**Exceeds expectations**:
The student will exceed expectations by achieving a score ≥ 12 on the independent practice

**Meets expectations**:
The student will meet my expectations by achieving a score = 12 on the independent practice

**Below expectations**:
The student will not meet my expectations by achieving a score < 12 on the independent practice

**3. How will you support your client to meet your goals? Describe EXPLICITLY what you will do!**

**BEGINNING: Launch/Hook/Anticipatory Set**

(How will you get the lesson started? What questions, texts, inquiry, modeling, and/or other techniques will you use to engage the client?)

The hook will be the diagnostic information making sure he remembers what he learned last time.

**MIDDLE: Instructional Strategies to Facilitate Student Learning**

(For example: How will you engage students with ideas/texts to develop understandings? What questions will you ask? How will you promote question generation/discussion? What activities will you use to engage the student in learning? How will you incorporate technology? How will you address the academic language demands? **Detail your plan.** Note: For math lesson plans, please write or attach every task/problem students will solve during the lesson – with the correct answers.)

**Instruction / Modeling:**

1. After the diagnostic assessment, I will begin by showing him how to multiply two numbers using the base-10 blocks. Like last week, a base-10 flat is worth one, a base-10 rod is worth one-tenth, and a base-10 block is worth one-one hundredth. I will demonstrate how to use base-10 blocks to multiply whole numbers to show how it is done. I will then show him how to multiply decimals using the base-10 blocks. This part is to help him understand the concepts behind the multiplication of decimals by giving him a concrete model to follow. The base-10 block method also works for multiplying decimals > 1 while the second method works best for decimals < 1.

The base-10 block method is an array method. Base-10 block are set out in an array and then counted. Consider 2 * 3. An array is constructed consisting of two flats across by three flats down. Counting up the flats grants us the answer we need, 6. The same works with decimals. 2.3 * 1.5 is two flats and three rods across by one flat and five rods down. After this is constructed, fill in the empty space with blocks. Counting up the blocks gives you two flats, thirteen rods, and fifteen blocks, which can be regrouped to make the number 3.45.

2. Next, I will show him a method which does not require the manipulatives, the table method. This method works best with numbers less than one. A table is set up which is ten by ten blocks in size. As before, each block is one-one hundredth, each row/column (rod) is one-tenth, and the table itself (flat) is one. Consider .7 * .3 as an example. To solve this, color in seven rows with one color and three columns with another color. The squares colored in with both colors is your answer.

**Guided Practice:**

During/After instruction, I will come up with some problems for him to practice with which we will solve together using both the base-10 blocks and the table method.

**Independent Practice:**

I have a worksheet from an online source (below, attached in BB). After this week, now that I have a better handle on things, I hope to move away from worksheets.

**END: Closure**

(How will you end the lesson in a way that promotes student learning and retention?)

Closure will be a simple question of, “which method did you like best?” and a reminder to use the methods he learns whenever he’s working on math.

**What Ifs**

(Be proactive – Consider what might not go as planned with the lesson. What will you do about it?

**What if the student…shows a mastery of the skills in the pre-assessment?**

Then, I will follow the same format to teach division of decimals or I can see if I can help him understand something he is currently working on in school. I understand he is currently studying geometry (more specifically, circles) in school

**What if the student cannot…focus on the task(s) at hand?**

Then, we will take a break, move around, visit Dr. Beveridge, etc. Once back, I will try and reduce any distractions.

**Professional References**

(Cite all sources used in the development of this lesson including URLs or other references)

Boucher, D. (2015, September). *Multiplying Decimals*. Retrieved from Math Coach's Corner: www.mathcoachscorner.com/2015/09/multiplying-decimals/

Common Core Sheets. (2018). *Decimal Worksheets*. Retrieved from Common Core Sheets: http://www.commoncoresheets.com/Decimals.php