edTPA Lesson Plan

Teacher Candidate’s Name: Christina Gutenberger

Date: March 1, 2015

Topic of Lesson Segment (3-5 Lessons): Three-Digit Subtraction

Lesson #: 1

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| **Focus Learner’s** | **Academic Learning Goal** | | | | **Related Measurable Objective** |
| Initials: AD  Age:8  Grade: 2 | AD will be able to subtract three digit numbers correctly 3 out of 5 trials.  Students will be able to use place value understanding and properties of operation to subtract three-digit numbers. | | | | Students will be able to draw quick pictures to model 3-digit subtraction 8 out of 10 trials.  AD will be able to subtract three digit numbers correctly 3 out of 5 trials. |
| **IEP Goal Connected to the Learning Segment** | | | **Related Common Core Standard(s)** | | |
| AD will be able to subtract three digit numbers correctly 3 out of 5 trials | | | Common Core State Standard Grade 2. Numbers Base Ten. B. 7: Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | | |
| **Planned Support Strategy to Meet Academic Learning Goal** | | | **Instructional Materials and Resources for this Lesson** | | |
| AD has difficulty with grouping when asked to subtract. The teacher will illustrate the numbers needed to subtract in order for AD to visualize the numbers. Math blocks will be used as a visual kinesthetic support to subtract numbers.  English Language Learner Illustration Strategy, Math Blocks | | | Math On the Spot Video Tutor, Base Ten Math Blocks, Dry erase boards, dry erase markers, dry erasers | | |
| **Sources of Baseline Data** | | | **Plans to Build on Baseline Data for Academic Learning Goal** | | |
| Go Math! Chapter 6 Assessment:  Three-digit Subtraction Problems | | | AD had difficulty with regrouping when asked to subtract. She will be given illustration strategies, a place value chart, and math blocks to promote an understanding of when she needs to regroup. | | |
| **Communication Skill to be Developed** | | | **Planned Supports to Develop the Communication Skill** | | |
| AD struggles to explain the mathematics problem-solving strategy. The strategy to be used to assist AD’s communication skill will be sentence frames.  AD will complete the sentence frame, **You regroup tens in subtraction when \_\_\_\_\_\_.** | | | AD will watch the Math on the Spot Video to watch Sesame Street Characters use the strategy “make a model.” The video reinforces the sentence stem when the characters use it throughout the interactive video. | | |
| **Communication Skills/Demands Part II Plans for Academic Language Support and Vocabulary** | | | **Universal Design for Learning Principles Utilized** | | |
| ELL Vocabulary Word Wall Activity: Teacher will list words on the board and have students define the words. She will have AD select two or three words from the list and have her write sentences using the words. AD will share her sentences and discuss with her partner if she used them correctly. AD will add the words to her individual word wall that is in her math journal. | | | Providing multiple means of representation:  The teacher will review the +,-,and = symbols and what they mean. AD will illustrate her understanding of these symbols throughout the course of each learning segment. | | |
| **Addressing Strengths, Needs, and Interests** | | | | | |
| AD does have prior learning experiences with one and two-digit subtraction problems. AD enjoys Princesses, and Hello Kitty characters. AD has been previously assessed to scaffold where she is in relation to her IEP goal of being able to subtract three-digit numbers. AD’s use of math base-ten blocks is a strength and are suggested in her IEP. AD will be using the base-ten blocks in each of the lessons. AD will also use a place value chart that she is familiar with. She was able to decorate it and make it her own. AD’s small group will allow her to be comfortable and receptive of new material in the lessons. Starting in a small group and moving to a whole group each lesson, allows AD to have exposure and fluency with the work for an easier transition to initiate conversation with her peers. The daily routines in the classroom are a consistent structure that allows AD to spiral review math fact fluency, and technology, after learning new material. AD will be encouraged to create her own problems in her math journal. She is encouraged to use her favorite Princess, Ariel in order to maintain a high level of interest in her word problem creations. | | | | | |
| **Mini-Lesson (I Do)** | | | | | |
| The class will be split into two groups. One group will be practicing math fact fluency using technology. The other group will be on the front rug with the teacher, doing the mini lesson on the smartboard. When the mini-lesson is completed, the groups will switch.  After the second group completes their mini-lesson, the students return to their independent math spots with their partners to complete their work. Students who missed a quick check will meet the teacher at the front rug for response to intervention group work. | | | | **Math Fact Fluency with Technology**- Students use individualized lessons through two online programs to practice math fact fluency:  [www.reflexmath.com](http://www.reflexmath.com)  [www.i-ready.com](http://www.i-ready.com)  AD has been assigned 4 extra review lessons on i-Ready that review 3-digit subtraction in conjunction with this lesson segment. | |
| **Estimated Time** | **Activity Description, Purpose and Materials** | | | **Plans for: Verbal Feedback, Checks for Understanding, and Teaching Towards Independence** | |
| 5 Minutes | Activating Prior Knowledge: The teacher will ask the students “How can you model 875?”. The teacher will ask “How could you show subtracting 6 hundred from 6 hundred”? | | | | Turn and talk: What did your partner show? Thumbs up if you and your partner got the same answer. |
| 15 Minutes | The teacher will review how to draw each of the place values in quick picture form. She will read a problem that is posted on the board. She will have students work through the problem solving graphic organizer together as she talks: What is the problem asking me to find? What information do I need to use? How can you use the blocks to help you solve the problem? How can you show how to take away 219 from your mode of 436? The teacher will explain that “modeling through quick pictures helps students show their thinking.” | | | | Turn and talk to your partner: What information do you need to use?  The teacher will give a high five to the students that volunteer their answers. |
| **Guided Practice (We Do)** | | | | | |
| 15 Minutes | The teacher will write 532-319= \_\_\_\_\_ on the board. She will have students use base-ten blocks and a quick picture to show 532. The teacher will have two students in the group model with blocks to show the action of subtracting.  The teacher will have students draw to show how to regroup 1 ten as 10 ones. Then she will have them subtract 9 ones from 12 ones.  Students will finish the problem and talk to their partner about the steps they took. The teacher will remind them that this strategy is making a model and using a quick picture to solve. | | | | What do I need to find? What information do I need to use? |
| 5 Minutes | Model Problem: the students will look at a model problem the teacher will work through the steps in the model problem with the students. AD will use the blocks to model the action in the problem.   * At this time, students do two problems on their own as a quick check. They show the teacher their answers. If the student correctly answered both questions, they go to their math spots to complete the independent work with their partners. Students who missed a quick check problem will be pulled to a small group for response to intervention instruction. | | | | In the first step, what do the quick pictures show?  How do you show the model in a quick picture? |
| **Independent Practice (You Do)** | | | | | |
| 10 Minutes  Independent  Practice | Students who completed the quick check problems correctly will complete 3 subtraction word problems. Then they will continue to use their blocks to preform three-digit subtraction. | | | | Partner questions: What is the problem asking us to do?  Do we have enough ones to subtract?  Did you regroup the tens place into the ones place? |
| 5 Minutes RTI then 5 Minutes Independent Practice | Students who missed a quick check will work with the teacher in a small group. She will use the personal math trainer online resource to demonstrate how to use the blocks to subtract. She will call up students to come to the board and use the personal math trainer for another example. | | | | Do you have enough to subtract?  What do you need to break apart? |
| **Response to Intervention Problem & Questioning**: The teacher will use the problem: “AD has 234 crayons. She gives 110 crayons to Brandon. How many crayons does AD have left?” The teacher will ask the student to model 234 with blocks on their workmates. She will ask: “What is the value of the hundreds digit?” (2 hundreds) The teacher will ask the student “What is the value of the tens digit?”(3 tens) Then she will ask “What is the value of the ones digit?” (4 ones) The teacher will discuss the values of the digits in 110 with the student. The teacher will ask the student to subtract 110 from the number they modeled with blocks, first subtracting the ones, then the tens, and then the hundreds. The teacher will ask the student to look at the blocks that remain in the model, and tell the answer to the problem. (124 crayons). | | | | | |
| **Plans for Daily Assessment** | | | | | |
| **Assessment Activities** | | **Criteria for Success** | | | **Feedback Type to Student** |
| Quick Check | | Correct responses to: there were 237 books on the table. AD took 126 books off the table. How many books were still on the table? **111** and  There were 232 Hello Kitty toys on the table. The sister used 118 of them. How many Hello Kitty toys were left on the table?  **114** | | | Great job AD! Can you explain to me your thinking? Wow, I’m impressed!  Enrichment worksheet: What is the Difference.  If AD has difficulty explaining her thinking, the teacher will use the response to intervention problem and questioning to scaffold communication and facilitate discussion. |
| Problem Solving Question | | Question 7, AD will recognize that she needs to subtract to find the number of girls. (**301**) She may add the two numbers and incorrectly choose 793 as the answer. | | | You continue to impress me! That is THIRD GRADE thinking!  Keep up the great work!  If AD struggles and adds the two numbers, the teacher will break down the words in the problem and ask her what words indicate that she needs to subtract. |
| Math Journal | | Have AD make a model and explain: How can making a model help when solving subtraction problems?  Draw a quick picture to show how to subtract 314 from 546. | | | Students will discuss what it takes to get a star on the math journal:  A proper heading  Title: “Math Journal”  A Correct Model and Quick Picture  An explanation such as: **You can use blocks to model the action in a problem.** |

edTPA Lesson Plan

Teacher Candidate’s Name: Christina Gutenberger

Date: March 2, 2015

Topic of Lesson Segment (3-5 Lessons): Three-Digit Subtraction

Lesson #: 2

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| --- | --- | --- | --- | --- | --- |
| **Focus Learner’s** | **Academic Learning Goal** | | | | **Related Measurable Objective** |
| Initials: AD  Age:8  Grade: 2 | AD will be able to subtract three digit numbers correctly 3 out of 5 trials.  Students will be able to use place value understanding and properties of operation to subtract three-digit numbers. | | | | Students will be able to use a place value chart to model 3-digit subtraction for 8 out of 10 trials. |
| **IEP Goal Connected to the Learning Segment** | | | | **Related Common Core Standard(s)** | |
| AD will be able to subtract three digit numbers correctly 3 out of 5 trials | | | | Common Core State Standard Grade 2. Numbers Base Ten. B. 7: Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | |
| **Planned Support Strategy to Meet Academic Learning Goal** | | | | **Instructional Materials and Resources for this Lesson** | |
| AD had difficulty with grouping when asked to subtract. The teacher will model math vocabulary, and what they mean. AD will use vocabulary cards with pictures and cognates on them to build fluency. The math cards will be used as a visual support to subtraction concepts.  English Language Learner Restate Strategy, Vocabulary Cards, Math Blocks | | | | Math On the Sport Video Tutor, Math Blocks, Place Value Chart | |
| **Sources of Baseline Data** | | | | **Plans to Build on Baseline Data for Academic Learning Goal** | |
| Go Math! Chapter 6 Assessment:  Three-digit Subtraction Problems | | | | AD had difficulty with grouping when asked to subtract. She will be given illustration strategies, a place value chart, and math blocks to promote an understanding of when she needs to regroup. | |
| **Communication Skill to be Developed** | | | | **Planned Supports to Develop the Communication Skill** | |
| AD struggles to explain the mathematics problem-solving strategy. The strategy to be used to assist AD’s communication skill will be sentence frames.  AD will complete the sentence frame, **You regroup tens in subtraction when \_\_\_\_\_\_.** | | | | Illustrate Understanding: AD will use blocks to subtract. Then AD will draw to show how to regroup 1 ten as 10 ones. The teacher will model the sentence stem when she uses it throughout the modeling. AD will be asked to repeat it, and then create it in her own words. | |
| **Communication Skills/Demands Part II Plans for Academic Language Support and Vocabulary** | | | | **Universal Design for Learning Principles Utilized** | |
| ELL Vocabulary Word Wall Activity: Teacher will list words on the board and have students define the words. She will have AD select two or three words from the list and have her write sentences using the words. AD will share her sentences and discuss with her partner if she used them correctly. AD will add the words to her word wall. | | | | Providing multiple means of representation:  The teacher will review the +,-,and = symbols and what they mean. AD will illustrate her understanding of these symbols throughout the course of each learning segment. | |
| **Addressing Strengths, Needs, and Interests** | | | | | |
| AD does have prior learning experiences with one and two-digit subtraction problems. AD enjoys Princesses, and Hello Kitty characters. AD has been previously assessed to scaffold where she is in relation to her IEP goal of being able to subtract three-digit numbers. AD’s use of math base-ten blocks is a strength and are suggested in her IEP. AD will be using the base-ten blocks in each of the lessons. AD will also use a place value chart that she is familiar with. She was able to decorate it and make it her own. AD’s small group will allow her to be comfortable and receptive of new material in the lessons. Starting in a small group and moving to a whole group each lesson, allows AD to have exposure and fluency with the work for an easier transition to initiate conversation with her peers. The daily routines in the classroom are a consistent structure that allows AD to spiral review math fact fluency, and technology, after learning new material. AD will be encouraged to create her own problems in her math journal. She is encouraged to use her favorite Princess, Ariel in order to maintain a high level of interest in her word problem creations. | | | | | |
| **Estimated Time** | **Activity Description, Purpose and Materials** | | | | **Plans for: Verbal Feedback, Checks for Understanding, and Teaching Towards Independence** |
| **Mini-Lesson (I Do)** | | | | | |
| The class will be split into two groups. One group will be practicing math fact fluency using technology. The other group will be on the front rug with the teacher, doing the mini lesson on the smartboard. When the mini-lesson is completed, the groups will switch.  After the second group completes their mini-lesson, the students return to their independent math spots with their partners to complete their work. Students who missed a quick check will meet the teacher at the front rug for response to intervention group work. | | | **Math Fact Fluency with Technology**- Students use individualized lessons through two online programs to practice math fact fluency:  [www.reflexmath.com](http://www.reflexmath.com)  [www.i-ready.com](http://www.i-ready.com)  AD has been assigned 4 extra review lessons on i-Ready that review 3-digit subtraction in conjunction with this lesson segment. | | |
| 5 Minutes | Vocabulary Card Review: Students will review lesson vocabulary cards with their partners.  Activating Prior Knowledge: The teacher will ask the students “How can you model 343?”. The teacher will ask “What are two different quick pictures you could draw to show 13 ones? | | | | Turn and talk: What did your partner show? Thumbs up if you and your partner got the same answer.  Great job math partners!  You are a good math partner because you are checking your partners work! |
| 15 Minutes | The teacher will review what the place value chart is. She will pick a number to model inside the place value chart.  She will read a model problem, and write the numbers on the board. The teacher will have select students use the blocks to model the subtraction and discuss strategies for solving. | | | | Will you add or subtract to solve? Explain your answer.  How can you use the blocks to solve the problem?  Do you need to regroup to solve this problem? Explain.  What does your model tell you about the answer to the question? |
| **Guided Practice (We Do)** | | | | | |
| 15 Minutes | The teacher will write 456-139= \_\_\_\_\_ on the board. She will have students use base-ten blocks to show 456.  The teacher will have students draw to show how to regroup 1 ten as 10 ones. Then she will have them subtract 9 ones from 16 ones.  Students will finish the problem and talk to their partner about the steps they took. | | | | Are there enough ones to subtract 9?  Fantastic job!  The teacher will give a high five to the students that volunteer their answers. |
| 5 Minutes | Model Problem: The students will look at a model problem. The teacher will work through the steps in the model problem with the students using questioning to lead the group discussion.   * At this time, students do two problems on their own as a quick check. They show the teacher their answers. If the student correctly answered both questions, they go to their math spots to complete the independent work with their partners. Students who missed a quick check problem will be pulled to a small group for response to intervention instruction. | | | | In the first step, what do the quick pictures show?  How do you show the regrouping when you write the problem?  Keep up the great work ladies and gentleman! |
| **Independent Practice (You Do)** | | | | | |
| 10 Minutes  Independent  Practice | Students who completed the quick check problems correctly will complete 4-5 subtraction problems. Then they will continue to use their place value charts to solve 4 word problems that require to preform three-digit subtraction. | | | | Partner questions: What is the problem asking us to do?  Do we have enough to subtract?  Did you regroup the tens place?  What strategy did you use? |
| 5 Minutes RTI then 5 Minutes Independent Practice | Students who missed a quick check will work with the teacher in a small group. She will use the personal math trainer online resource to demonstrate how to use the blocks to subtract. She will call up students to come to the board and use the personal math trainer for another example. | | | | Do you have enough to subtract?  What do you need to break apart? |
| **Response to Intervention Problem & Questioning**: The teacher will write 363 – 146 on the small whiteboard. Model 363 on the place value chart using base-ten blocks, and have the student write the number 363 as a quick picture on their individualized place value chart. Then the teacher will ask: “Are there enough ones to subtract 6 from 3?” (no) The teacher will explain that you need to regroup 1 ten as 10 ones. The teacher will model this regrouping and show the student how to record the regrouping in the problem on the place value board. The teacher will say, “now we can subtract 6 ones from 13 ones.” The teacher will model the subtraction, and the student will do the same on their board. She will ask “how many ones are there now?” (7 ones) the teacher will record the 7 in the difference on the place value board. Then, the teacher will model the subtraction of the tens, and the student will do the same on their place value boards. The teacher will ask: “How many tens are there now?” (1 ten) The teacher will record the 1 in the difference on the board. The teacher will continue to model and record the subtraction of the hundreds. The teacher will then ask the student to say the difference. (217) | | | | | |
| **Plans for Daily Assessment** | | | | | |
| **Assessment Activities** | | **Criteria for Success** | | | **Feedback Type to Student** |
| Quick Check | | Correct responses to: 431-326=**105**  and 658-237= **421.** | | | Great job AD! Can you explain to me your thinking? Wow, I’m impressed!  Enrichment worksheet: Subtraction steps with writing and reasoning response.  If AD has difficulty explaining her thinking, the teacher will use the response to intervention problem and questioning to scaffold communication and facilitate discussion. |
| Problem Solving Question | | Question 9, AD will realize that the problem contains extra information. She will discuss the information needed to solve the problem with her partner.  Correct Response: **107** whistles. | | | You continue to impress me! That is THIRD GRADE thinking!  If AD has difficulty choosing information to use, the teacher will ask her “What does the problem want you to find? What information do you need?”. |
| Math Journal | | Reflect: Using the Language Objective, the teacher will have students complete the sentence frame**, You regroup tens in subtraction when\_\_\_\_\_\_, to answer the question:**  **When do you regroup tens in subtraction. Draw a quick picture for 431-326=\_\_\_\_\_\_\_** | | | Students will discuss what it takes to get a star on the math journal:  A proper heading  Title: “Math Journal”  A Correct Quick Picture  A full sentence using “You regroup tens in subtraction when \_\_\_\_\_\_\_.” |
| Response to Intervention Problem & Questioning: The teacher will use the problem: “AD has 234 crayons. She gives 110 crayons to Brandon. How many crayons does AD have left?” The teacher will ask the student to model 234 with blocks on their workmates. She will ask: “What is the value of the hundreds digit?” (2 hundreds) The teacher will ask the student “What is the value of the tens digit?”(3 tens) Then she will ask “What is the value of the ones digit?” (4 ones) The teacher will discuss the values of the digits in 110 with the student. The teacher will ask the student to subtract 110 from the number they modeled with blocks, first subtracting the ones, then the tens, and then the hundreds. The teacher will ask the student to look at the blocks that remain in the model, and tell the answer to the problem. (124 crayons). | | | | | |

edTPA Lesson Plan

Teacher Candidate’s Name: Christina Gutenberger

Date: March 3, 2015

Topic of Lesson Segment (3-5 Lessons): Three-Digit Subtraction

Lesson #: 3

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| **Focus Learner’s** | **Academic Learning Goal** | | | | **Related Measurable Objective** |
| Initials: AD  Age:8  Grade: 2 | AD will be able to subtract three digit numbers correctly 3 out of 5 trials.  Students will be able to use place value understanding and properties of operation to subtract three-digit numbers. | | | | Students will record 3-digit subtraction using the standard algorithm with possible regrouping of hundreds for 8 out of 10 trials. |
| **IEP Goal Connected to the Learning Segment** | | | | **Related Common Core Standard(s)** | |
| AD will be able to subtract three digit numbers correctly 3 out of 5 trials | | | | Common Core State Standard Grade 2. Numbers Base Ten. B. 7: Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | |
| **Planned Support Strategy to Meet Academic Learning Goal** | | | | **Instructional Materials and Resources for this Lesson** | |
| AD has difficulty with grouping when asked to subtract. The teacher will model the numbers needed to subtract in order for AD to visualize the numbers. Math blocks will be used as a visual kinesthetic support to subtract numbers.  English Language Learner Model Concepts, Math Blocks | | | | Math On the Sport Video Tutor, Math Blocks | |
| **Sources of Baseline Data** | | | | **Plans to Build on Baseline Data for Academic Learning Goal** | |
| Go Math! Chapter 6 Assessment:  Three-digit Subtraction Problems  Quick Check answers from previous lesson | | | | AD had difficulty with grouping when asked to subtract. She will be given illustration strategies, a place value chart, and math blocks to promote an understanding of when she needs to regroup. | |
| **Communication Skill to be Developed** | | | | **Planned Supports to Develop the Communication Skill** | |
| AD struggles to explain the mathematics problem-solving strategy. The strategy to be used to assist AD’s communication skill will be sentence frames.  AD will complete the sentence frame, **You regroup tens in subtraction when \_\_\_\_\_\_.** | | | | Illustrate Understanding: AD will use blocks to subtract. Then AD will draw to show how to regroup 1 ten as 10 ones. The teacher will model the sentence stem when she uses it throughout the modeling. AD will be asked to repeat it, and then create it in her own words. | |
| **Communication Skills/Demands Part II Plans for Academic Language Support and Vocabulary** | | | | **Universal Design for Learning Principles Utilized** | |
| ELL Vocabulary Word Wall Activity: Teacher will list words on the board and have students define the words. She will have AD select two or three words from the list and have her write sentences using the words. AD will share her sentences and discuss with her partner if she used them correctly. AD will add the words to her word wall. | | | | Providing multiple means of representation:  The teacher will review the +,-,and = symbols and what they mean. AD will illustrate her understanding of these symbols throughout the course of each learning segment. | |
| **Addressing Strengths, Needs, and Interests** | | | | | |
| AD does have prior learning experiences with one and two-digit subtraction problems. AD enjoys Princesses, and Hello Kitty characters. AD has been previously assessed to scaffold where she is in relation to her IEP goal of being able to subtract three-digit numbers. AD’s use of math base-ten blocks is a strength and are suggested in her IEP. AD will be using the base-ten blocks in each of the lessons. AD will also use a place value chart that she is familiar with. She was able to decorate it and make it her own. AD’s small group will allow her to be comfortable and receptive of new material in the lessons. Starting in a small group and moving to a whole group each lesson, allows AD to have exposure and fluency with the work for an easier transition to initiate conversation with her peers. The daily routines in the classroom are a consistent structure that allows AD to spiral review math fact fluency, and technology, after learning new material. AD will be encouraged to create her own problems in her math journal. She is encouraged to use her favorite Princess, Ariel in order to maintain a high level of interest in her word problem creations. | | | | | |
| **Estimated Time** | **Activity Description, Purpose and Materials** | | | | **Plans for: Verbal Feedback, Checks for Understanding, and Teaching Towards Independence** |
| **Mini-Lesson (I Do)** | | | | | |
| The class will be split into two groups. One group will be practicing math fact fluency using technology. The other group will be on the front rug with the teacher, doing the mini lesson on the smartboard. When the mini-lesson is completed, the groups will switch.  After the second group completes their mini-lesson, the students return to their independent math spots with their partners to complete their work. Students who missed a quick check will meet the teacher at the front rug for response to intervention group work. | | | **Math Fact Fluency with Technology**- Students use individualized lessons through two online programs to practice math fact fluency:  [www.reflexmath.com](http://www.reflexmath.com)  [www.i-ready.com](http://www.i-ready.com)  AD has been assigned 4 extra review lessons on i-Ready that review 3-digit subtraction in conjunction with this lesson segment. | | |
| 5 Minutes | Activating Prior Knowledge: The teacher will ask the students “How can you model 453?” The teacher will ask “how many tens are in 100?” The teacher will have students use quick pictures on their math slates to show 120 in different ways. | | | | Turn and talk: What did your partner show? Thumbs up if you and your partner got the same answer. |
| 15 Minutes | The teacher will review what the place value chart is. She will read a problem, and write the numbers on the board. She will have students use the blocks to model the subtraction and discuss strategies for solving. | | | | Will you add or subtract to solve? Explain your answer.  How can you use the blocks to solve the problem?  Do you need to regroup to solve this problem? Explain.  What does your model tell you about the answer to the question? |
| **Guided Practice (We Do)** | | | | | |
| 15 Minutes | The teacher will write 635-152= \_\_\_\_\_ on the board. She will have group 1 students use base-ten blocks to show 635. She will have group 2 students use the place value chart to draw a quick picture of 635.  The teacher will list the steps on the board as the group is working through the problem.  Students will finish the problem and talk to their partner about the steps they took. | | | | Do you need to use quick pictures to model this problem? |
| 5 Minutes | Model Problem: The students will look at a model problem. They will discuss the correct order of the subtraction steps. The teacher will work through the three steps in the model with the students. The teacher will not that a common error is that students may regroup when regrouping is not needed. If students are unnecessarily regrouping, they will model with blocks.   * At this time, students do two problems on their own as a quick check. They show the teacher their answers. If the student correctly answered both questions, they go to their math spots to complete the independent work with their partners. Students who missed a quick check problem will be pulled to a small group for response to intervention instruction. | | | | When the subtraction in the ones column is done, why is no regrouping shown?  In the second step, what do the 3 and the 12 written in the boxes above 428 show? (Regrouping).  Excellent job mathematicians! Keep up the great work! |
| **Independent Practice (You Do)** | | | | | |
| 10 Minutes  Independent  Practice | Students who completed the quick check problems correctly will complete 4-5 subtraction problems. Then they will continue to use their place value charts to solve 4 word problems that require to preform three-digit subtraction. | | | | Partner questions: What is the problem asking us to do?  Do we have enough to subtract?  Did you regroup the tens place?  What strategy did you use? |
| 5 Minutes RTI then 5 Minutes Independent Practice | Students who missed a quick check will work with the teacher in a small group. She will use the personal math trainer online resource to demonstrate how to use the blocks to subtract. She will call up students to come to the board and use the personal math trainer for another example. | | | | Do you have enough to subtract?  What do you need to break apart? |
| **Response to Intervention Problem & Questioning**: The teacher will use blocks to model using a visual/kinesthetic strategy. The teacher will write 356 − 184 on the small whiteboard. The teacher will have students model 356 using base-ten blocks and subtract the ones by removing 4 ones blocks. Then she will ask: What is the subtraction in the tens column? (5 tens minus 8 tens) The teacher will ask “are there enough tens blocks to subtract 8 tens from?” (no) The teacher will model regroup 1 hundred by trading 1 hundreds block for 10 tens blocks, and have the student count along. After the student does this, the teacher will ask: “Now you have 15 tens to subtract 8 tens from, let’s subtract.” The teacher will show the student how to record each step on the board. The teacher will have the student remove 8 tens, leaving 7 tens. The teacher will show the student how to record the 7 in the tens place. Then the teacher will guide the student through subtracting the hundreds. The teacher will review each step shown in the algorithm and have the student tell the teacher the answer. (172) | | | | | |
| **Plans for Daily Assessment** | | | | | |
| **Assessment Activities** | | **Criteria for Success** | | | **Feedback Type to Student** |
| Quick Check | | Correct responses to: 478-356=**122**  and 814-263=**551.** | | | Great job AD! Can you explain to me your thinking? Wow, I’m impressed!  Enrichment worksheet: Subtraction steps with writing and reasoning response.  If AD has difficulty explaining her thinking, the teacher will use the response to intervention problem and questioning to scaffold communication and facilitate discussion. |
| Problem Solving Question | | Question 10, Students will subtract 276-139. They will compare 139>137.  Correct Response: **137**. | | | You continue to impress me! That is THIRD GRADE thinking!  If AD has difficulty subtracting, she will model the problem with blocks. The teacher will ask AD to find the answer on the number line in the classroom to compare and see which number is bigger. |
| Math Journal | | Reflect: Using the Language Objective, the teacher will have students complete the sentence frame**, You regroup tens in subtraction when\_\_\_\_\_\_, to answer the question:**  **When do you regroup tens in subtraction. Draw a quick picture for 838-462=\_\_\_\_\_\_\_** | | | Students will discuss what it takes to get a star on the math journal:  A proper heading  Title: Math journal  Quick Picture of 838-462=  Students will evaluate their peers during the share. |

edTPA Lesson Plan

Teacher Candidate’s Name: Christina Gutenberger

Date: March 4, 2015

Topic of Lesson Segment (3-5 Lessons): Three-Digit Subtraction

Lesson #: 4

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| **Focus Learner’s** | **Academic Learning Goal** | | | | **Related Measurable Objective** |
| Initials: AD  Age:8  Grade: 2 | AD will be able to subtract three digit numbers correctly 3 out of 5 trials.  Students will be able to use place value understanding and properties of operation to subtract three-digit numbers. | | | | Students will be able to record 3-digit subtraction using the standard algorithm with possible regrouping of both hundreds and tens for 8 out of 10 trials. |
| **IEP Goal Connected to the Learning Segment** | | | | **Related Common Core Standard(s)** | |
| AD will be able to subtract three digit numbers correctly 3 out of 5 trials | | | | Common Core State Standard Grade 2. Numbers Base Ten. B. 7: Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | |
| **Planned Support Strategy to Meet Academic Learning Goal** | | | | **Instructional Materials and Resources for this Lesson** | |
| AD benefits from being paired with a fellow Spanish speaking student, in order to communicate freely in both English and Spanish throughout the stages of the lesson. AD also benefits from using a graphic organizer to organize her math pictures.  English Language Learner Cooperative Grouping Strategy, Place Value Chart Math Blocks | | | | Math On the Sport Video Tutor, Math Blocks, Place Value Chart, 3-Digit Subtraction Step Chart from previous lesson. | |
| **Sources of Baseline Data** | | | | **Plans to Build on Baseline Data for Academic Learning Goal** | |
| Go Math! Chapter 6 Assessment:  Three-digit Subtraction Problems  Quick Check answers from previous lesson | | | | AD had difficulty with grouping when asked to subtract. She will be given illustration strategies, a place value chart, and math blocks to promote an understanding of when she needs to regroup. | |
| **Communication Skill to be Developed** | | | | **Planned Supports to Develop the Communication Skill** | |
| AD struggles to explain the mathematics problem-solving strategy. The strategy to be used to assist AD’s communication skill will be sentence frames.  AD will complete the sentence frame, **You know you need to regroup in subtraction when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** | | | | AD will revisit the steps for three-digit subtraction. The teacher will the chapter vocabulary, as well as the words “top, bottom, first, and next” to prepare AD for using the steps. The teacher will model the sentence stem when she uses it throughout the listing of subtraction steps. AD will be asked to repeat it, and then create it in her own words. | |
| **Communication Skills/Demands Part II Plans for Academic Language Support and Vocabulary** | | | | **Universal Design for Learning Principles Utilized** | |
| ELL Vocabulary Activity: In their partners they will be given math kits. This chapter vocabulary cards are in them, as well as task cards. One partner will point to the word or task that is on the card, and the other partner will describe the word or do the task on their slates. The students will review the meaning on the back of the card (Examples: difference, hundred, regroup, sum). Partners will write examples of each of the vocabulary cards on their slates. They will regroup numbers, they will also identify addends and sums in number sentences. The partner pairs will take turns completing each of the cards. | | | | Providing multiple means of representation:  The teacher will review the +,-,and = symbols and what they mean. AD will illustrate her understanding of these symbols throughout the course of each learning segment. | |
| **Addressing Strengths, Needs, and Interests** | | | | | |
| AD does have prior learning experiences with one and two-digit subtraction problems. AD enjoys Princesses, and Hello Kitty characters. AD has been previously assessed to scaffold where she is in relation to her IEP goal of being able to subtract three-digit numbers. AD’s use of math base-ten blocks is a strength and are suggested in her IEP. AD will be using the base-ten blocks in each of the lessons. AD will also use a place value chart that she is familiar with. She was able to decorate it and make it her own. AD’s small group will allow her to be comfortable and receptive of new material in the lessons. Starting in a small group and moving to a whole group each lesson, allows AD to have exposure and fluency with the work for an easier transition to initiate conversation with her peers. The daily routines in the classroom are a consistent structure that allows AD to spiral review math fact fluency, and technology, after learning new material. AD will be encouraged to create her own problems in her math journal. She is encouraged to use her favorite Princess, Ariel in order to maintain a high level of interest in her word problem creations. | | | | | |
| **Estimated Time** | **Activity Description, Purpose and Materials** | | | | **Plans for: Verbal Feedback, Checks for Understanding, and Teaching Towards Independence** |
| **Mini-Lesson (I Do)** | | | | | |
| The class will be split into two groups. One group will be practicing math fact fluency using technology. The other group will be on the front rug with the teacher, doing the mini lesson on the smartboard. When the mini-lesson is completed, the groups will switch.  After the second group completes their mini-lesson, the students return to their independent math spots with their partners to complete their work. Students who missed a quick check will meet the teacher at the front rug for response to intervention group work. | | | **Math Fact Fluency with Technology**- Students use individualized lessons through two online programs to practice math fact fluency:  [www.reflexmath.com](http://www.reflexmath.com)  [www.i-ready.com](http://www.i-ready.com)  AD has been assigned 4 extra review lessons on i-Ready that review 3-digit subtraction in conjunction with this lesson segment. | | |
| 5 Minutes | Activating Prior Knowledge: The teacher will have a student come to the board and draw a quick picture to show 250. Then regroup hundred into 10 tens.  Another student will model the same for the number 462. | | | | Turn and talk: How many hundreds and tens are there now?  Are there different ways to draw a quick picture for the same number? |
| 15 Minutes | The teacher will review the strategies they have discussed so far in the learning segment. She will read a problem, and write the numbers on the board. She will have some students use the blocks to model the subtraction and discuss strategies for solving. She will have some students use a quick picture to model the subtraction and discuss strategies for solving. She will have some students use a place value chart to model the subtraction and discuss strategies for solving. | | | | How did you solve each problem?  What were your steps in each problem?  If you regrouped, which place value did you have to regroup from?  The teacher will give a high five to the students that volunteer their models and subtraction steps. |
| **Guided Practice (We Do)** | | | | | |
| 15 Minutes | The teacher will write 725-349= \_\_\_\_\_ on the board. She will have to use the steps they learned in the previous lesson to complete the problem.  The teacher will state that sometimes you will regroup more than once in subtraction problems.  Students will finish the problem and talk to their partner about the steps they took. | | | | Why do you look at the digits in the ones column first? Why are there two numbers above the 2 in the tens column?  How many times did you need to regroup? Explain. |
| 5 Minutes | Model Problem: the students will look at a model problem. The students will work through the steps in the model problem with the teacher, and check their math partners work along the way: 382-163=\_\_\_\_\_   * At this time, students do two problems on their own as a quick check. They show the teacher their answers. If the student correctly answered both questions, they go to their math spots to complete the independent work with their partners. Students who missed a quick check problem will be pulled to a small group for response to intervention instruction. | | | | Why do you look at the digits in the ones column first?  How many times did you need to regroup? Explain.  Fantastic job! This is third grade thinking! |
| **Independent Practice (You Do)** | | | | | |
| 10 Minutes  Independent  Practice | Students who completed the quick check problems correctly will complete 9 subtraction problems. Then they will continue to use their place value charts to solve 3 word problems that require to preform three-digit subtraction. | | | | Partner questions: What is the problem asking us to do?  Do we have enough to subtract?  Did you regroup the tens place?  What strategy did you use?  Keep up the great work!  I love how you are using the steps correctly! |
| 5 Minutes RTI then 5 Minutes Independent Practice | Students who missed a quick check will work with the teacher in a small group. She will use the personal math trainer online resource to demonstrate how to use the blocks to subtract. She will call up students to come to the board and use the personal math trainer for another example. | | | | Do you have enough to subtract?  What do you need to break apart?  How many times did you regroup? |
| **Response to Intervention Problem & Questioning**: The teacher will write 532 − 254 in vertical form on the small whiteboard. She will have the student use base-ten blocks to model 53. The teacher will ask “Are there enough ones to subtract 4 ones? (No) The teacher will trade 1 tens block for 10 ones blocks. The student will then model this regrouping. On the small whiteboard, the teacher will cross out the 3 in the tens place of 532. She will then ask “How many tens do you have now?” (2 tens) The teacher will write a 2 above the crossed-out 3.The teacher will ask “how many ones do you have now?” (12 ones) The teacher will cross out the 2 in the ones place of 532. She will write 12 above the crossed-out 2. The teacher will ask “are there enough ones now to subtract 4 ones?” (yes) The teacher will ask “how many ones are left?” (8 ones) The teacher will write 8 in the ones place of the difference. The teacher will continue in the same way for subtracting the tens and hundreds. The teacher will have the student complete the difference of 278. | | | | | |
| **Plans for Daily Assessment** | | | | | |
| **Assessment Activities** | | **Criteria for Success** | | | **Feedback Type to Student** |
| Quick Check | | Correct responses to: 747-159= **588**, and 938-370= **568.** | | | Great job AD! Can you explain to me your thinking? Wow, I’m impressed!  Enrichment worksheet: Subtraction Squares.  If AD has difficulty explaining her thinking, the teacher will use the response to intervention problem and questioning to scaffold communication and facilitate discussion. |
| Problem Solving Question: Analyze | | Question 18, AD will use reasoning and 3-digit subtraction with regrouping to find the number of students who do not ride the bus. | | | You continue to impress me! That is THIRD GRADE thinking!  If AD has difficulty, she will model the problem on her place value chart. |
| Math Journal | | Reflect: Using the Language Objective, the teacher will have students complete the sentence frame**, You need to regroup in subtraction when \_\_\_\_\_\_.**  **Draw a quick picture to show how to subtract 546 from 735.** | | | Students will discuss what it takes to get a star on the math journal:  A proper heading  Title: Math journal  Quick Picture of 735-536=  Students will evaluate their peers during the share. |