

EDU 320 – Synthesis Paper

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## EDU 320 – Synthesis Paper

Teaching is a profession that requires patience, time, and commitment. The students are relying on you as the teacher to deliver the curriculum in a way that they will be able to understand and that will help them grow into successful adults. In order to deliver the content in such a way, it is important to understand how to be an effective teacher, how to deliver instruction, and how to assess students to make sure they are progressing at an acceptable rate. The journey towards becoming a teacher takes a lot of prepping and planning. This paper covers nine different themes of teaching along with artifacts that go hand in hand with the themes to help prepare for what lies ahead in the field of education.

### **The Effective Teacher**

#### **Description**

The description of an effective teacher is one that has changed over the course of time. Ask any student, and they will give different answers; such as, someone who cares for them, someone who makes learning easy for them, someone who communicates well, and so forth. Each student has a different description of what an effective teacher is to them, and most of the time, an effective teacher encompasses all that the students have stated. There isn't one specific quality that makes up the character of an effective teacher, rather there are several qualities that factor into this description.

#### **Artifact**

To better understand the role of an effective teacher, in class we split up into groups and broke ten standards apart that were presented to us in our textbook. These ten standards focus on four different topics which include; the learner and the learning, content knowledge, instructional practice, and professional responsibility. Each area is crucial to the professional development of

an effective teacher. Taking the time to discuss these standards (as shown in Appendix A) has helped me understand all of the elements that factor in to being an effective teacher.

### **How it Will Be Used in Classroom**

In order to become an effective teacher, what is learned has to be applied to the classroom setting. The ten standards are what I will refer to for my own professional development while in the classroom. To each class the description of an effective teacher will change along with the way I may teach the content, but the standards resemble what an effective teacher must exhibit at all times with each class. These four topics within the standards describe what an overall effective teacher looks like and needs to know, and that is why I will refer back to these standards so I can use the information given to apply in my own teaching.

## **Understanding Your Students**

### **Description**

Along with the ten standards that provide effective teaching methods, there are also other characteristics that factor into becoming that effective teacher, and that is getting to know and understand the students in the classroom. Each group of students that I will have will be different each year because not all groups or learners are alike. Getting to know each of my students individually will be a goal of mine because when I can understand who they are and where they come from, I will be able to better differentiate my instructional strategies based on their learning style and needs. There are so many factors that contribute to understanding students, such as; effects of culture, socioeconomic status, language barriers, among several others. Understanding where students come from will let them know that their teacher cares for them each as individuals and wants nothing but the best for them as they journey through school and life.

**Artifact**

The artifact that I created for this theme is one that will help me get to know each of my students as individuals (see Appendix B). This particular “get to know you” tool will be a way for me to see how a student’s home life might be, what they see as their strengths and weaknesses, and goals they have for themselves for the upcoming school year. Within this artifact I also included an area for them to tell me anything else they feel I should know about them. I thought that was important to include within this tool, for it allows me to get to know my students on a more personal level so I can adjust my teaching methods to how they learn if/when necessary.

**How it Will Be Used in Classroom**

This is a tool that I will use in my classroom on the first day of school as a way for me to get to know the students I will have that year. As stated previously, I created an area for the students to list two goals they have for themselves throughout the year. I want to document each students’ goals so we can work on them throughout the year, and then look back on these goals to see how much they accomplished. I think this is a great way for the students to reflect on the year and see how much they have grown and improved throughout time.

**Goals, Standards, and Objectives****Description**

Following goals, we have to have a way to reach them. That is why incorporating goals, standards, and objects within classroom lessons is important. In order to reach a goal, we need to identify a standard to more specifically identify what we are wanting to accomplish. By incorporating objectives, the students are working towards that goal that they are striving towards. Although these terms go hand in hand, they have very important individual meanings

which contributes largely within a lesson. Goals are general expressions of our values that give us a sense of direction, standards are derived from goals to more specifically identify what must be accomplished, and objectives convey specific behaviors to be attained (L Borich, 2017, p. 129).

### **Artifact**

In order to understand how goals, standards, and objectives, the artifact I created is a lesson plan (see Appendix C) that focuses on how these three terms build upon one another. The lesson plan I created focuses on rounding in math at the second-grade level. The ultimate goal is to master the concept of rounding using different techniques, one of which was a number line presented on the floor in the classroom. I then chose a standard that specifies the goal and then created objectives that detailed how we are going to accomplish this goal.

### **How it Will Be Used in Classroom**

Goals, standards, and objectives will be used continuously throughout the classroom. Not only because there are certain standards that need to be met for each grade level throughout the year, but because they are a way to monitor student progress. Through monitoring student progress, the students are also able to see how they have improved throughout the school year, which in turn makes them more confident for they can see how much they have grown. It is also important that I make my objectives known during my lessons so the students have an idea of what they should be able to do or what they should know at the end of the lesson. If the objectives have not been met, then as the teacher I am responsible for finding a way to teach the lesson so that each student has met the objective for that lesson.

## **Unit and Lesson Planning**

### **Description**

Planning ahead with any lesson is an important aspect of teaching. We want to make learning enjoyable for students and something that they can relate to. When planning different lessons throughout a unit, it is important to understand the learning needs of your students along with the five planning inputs; knowledge of goals and objectives, knowledge of learners, knowledge of subject-matter content and its organization, tacit knowledge acquired from day to day experiences and feedback in the classroom, and knowledge of teaching methods (L Borich, 2017, p. 160). The unit and lesson planning process begins with these five planning inputs, which is why it is important to understand each of them individually to create an effective lesson for the students.

### **Artifact**

In order to better understand the five planning inputs, I created an example of what an interdisciplinary plan would look like in a group with three others (see Appendix D). An interdisciplinary plan focuses on helping the students make connections in relation to different subjects. Our particular artifact focuses on Cinco de Mayo. We planned concepts of the lesson out for approximately two weeks incorporating several different subject areas along with different activities the students could do to better understand why this day is recognized. A lot of time, effort, and thought has to be put into such large plans such as this, especially with multiple subject areas being included. Creating this interdisciplinary plan with three other classmates was very helpful in understanding how these are put together as well as what should be considered upon creation.

### **How it Will Be Used in Classroom**

I think interdisciplinary plans should be used often throughout the school year. As a preservice teacher thinking of how I want to run my classroom, I think it is important to recognize that students like to know why they are learning what they are as well as the importance behind it. By incorporating different subject areas within a lesson, it gives the students a chance to explore and apply their knowledge to real life situations. I want to use this concept in the classroom whenever fit to help students see beyond the subject itself.

### **Technology Integration in Instruction**

#### **Description**

As time continues to progress, so does our technological resources. It is very uncommon these days to walk into a classroom and have there be little technology resources that students can use. Many schools have actually gone one to one, meaning each student has a designated laptop or iPad. When used in the appropriate manner, the technology we have can truly benefit student learning. The whole purpose of integrated technology into classroom instruction is to deliver the message in a more effective manner than if we didn't have it readily available to us. Incorporating technology into the classroom stimulates the learning process for students and is a way for teachers to present the content to the students more effectively.

#### **Artifact**

Technology in the classroom can be used in a variety of different ways to enhance student learning. To obtain a better grasp on the ways it can be used, the artifact that was created for this theme is a lesson plan that I created which incorporates the use of technology to enhance the students learning and understanding of the content (see Appendix E). I focused this particular lesson on a fourth-grade standard which discussed the symbols of North Dakota. The students

would be divided into groups and would be assigned a certain symbol of our state to research facts about. After the facts have been gathered, they will make a short video explaining the symbol they were assigned using a green screen which will display their particular symbol. This gets the students experimenting with technology and understanding the benefit that something such as a green screen can have when presenting information.

### **How it Will Be Used in Classroom**

As a teacher, I am going to have to keep up with all that technology has to offer in order to provide my students with the best education possible. Although technology for education is readily available, I want to make sure that in my classroom it is used to truly enhance the learning of students. I want my students to know that there is a purpose behind everything that we are doing in class. So many things are possible with the technology that we have, and I want to use that to our advantage to create an environment where students are always learning and expanding their knowledge.

### **Questioning Strategies**

#### **Description**

Along with enhancing students learning, another important aspect of teaching is challenging students with different questioning strategies. There is a purpose for questioning during lessons, and they include: getting interest and attention, diagnosing and checking, recalling specific facts of information, managing, encouraging higher-order thought processes, structuring and redirecting learning, and allowing expression of affect (L Borich, 2017, p. 224). These different questioning strategies can be used at all different levels and helps students stay engaged in the learning process as well. Knowing how to formulate these questions also requires



knowing the six levels of cognitive complexity, which includes; knowledge, analysis, comprehension, syntheses, application, and evaluation.

### **Artifact**

Asking the correct questions to cover all seven questioning categories is difficult. As a teacher, I want to ask questions that are going to challenge students to help them better understand the material as well as how to apply the information to the world around them. The artifact created for this theme was a lesson plan that incorporated the seven different questioning categories along with the six levels of cognitive complexity which is shown in Appendix F. Creating these questions was more difficult than originally anticipated; however, it helped me see the importance of using such questioning strategies in the classroom.

### **How it Will Be Used in Classroom**

Questioning strategies will always be something that I will need to incorporate into student learning. By using these different questioning strategies I am challenging the students to expand their thought processes to better understand the material they are learning. It also allows me to see if the students are ready to move on to another lesson or if we need to spend more time on the current material. Questioning strategies are crucial to student learning, and I plan to challenge my students to be the best that they can be by incorporating these strategies within their learning.

## **Teaching Strategies for Direct Instruction**

### **Description**

Direct instruction is a strategy where the teacher is the major source of information (L Borich, 2017, p. 255). This teaching strategy looks different, as does any strategy, at different age levels. If teaching a lower elementary grade, the direct instruction has to be fast paced and

organized due to the students have shorter attention spans. When utilizing this teaching strategy in the classroom, it is important to make sure you present the goals and main points clearly, present content sequentially, be specific and concrete, and check for student understanding.

### **Artifact**

The artifact created for this theme is a direct instruction lesson that I created using a PowerPoint presentation (see Appendix G). The PowerPoint was a way for me to present the information to the students using visual representations and provide them with practice opportunities to see if they are understanding the material. In my particular direct instruction lesson, I had the students work on solving word problems and understanding the importance of them, for they are applied to our everyday lives on a regular basis.

### **How it Will Be Used in Classroom**

Although I do believe it is important for students to learn using other hands on techniques, I do think direct instruction has a purpose within the classroom. In my classroom, I believe that I will use direct instruction often; however, I want to make sure that I always incorporate practice opportunities for my students. Direct instruction is an organized learning technique based on posed questions that allows for redundant practice. I want to use this technique in my classroom to ensure my students are understanding the goal and objectives of the lesson being taught.

## **Teaching Strategies for Indirect Instruction**

### **Description**

While direct teaching strategies are best used for teaching facts, indirect strategies are best used for teaching concepts, inquiry, and problem solving (L Borich, 2017, p. 290). In contrast to direct instruction, indirect instruction focuses a lot of attention on real-world analysis.

It is important to teach students how to make decisions that they will be analyzing in the real world so they know how to problem solve when the moment arises.

### **Artifact**

In order to better understand how to create and manage an indirect lesson plan, the artifact that I created and would love to use in the classroom someday is a grocery store for my students to practice buying goods. This particular lesson focuses on teaching the students how to problem solve when given a certain amount of money. Their task would be to use the store menu (see Appendix H) and use their problem-solving skills to see what they would be able to buy and how much money they would have left. This indirect lesson is a way to show students just how often we use problem solving in our everyday lives.

### **How it Will Be Used in Classroom**

I would like to use indirect instruction as much as possible in the classroom. I believe there needs to be a balance between indirect and direct instruction because they both bring valuable aspects to the table; being direct instruction focuses on relaying facts to the students where indirect is allowing the students to analyze real world problems themselves. I think it is very important that students understand why they are learning certain material throughout the year because in some way they can apply it to their everyday life; whether it be currently or further in the future.

## **Assessing Learners**

### **Description**

As educators, we have to know if our students are taking in the information that is being communicated to them. We have to know if they are understanding or if there is something that we have to work on as a class in more depth. In order to know where our students stand, we have

to assess them. Now, there are different ways to assess students. They can be assessed through means of a test, final project, observation, exit slips, and many more. When assessing students, as the teacher I will have a better and more clear understanding if my students truly understand the concepts of what is being taught.

### **Artifact**

Being there are several different ways to assess students, the artifact that was created for this theme is an example of a performance assessment (see Appendix I). This is a summative assessment, meaning something we would complete at the end of a unit, that focuses on the history of North Dakota. I would have my students in groups of two or three, and they would each have a different time period of North Dakota they would have to research and turn into a section of a newspaper article. Once the groups finished their research and editing, they would compile all of their sections to create a newspaper that they would display around the school for students and other staff members to take and read. This assessment is a way for me to see if they are understanding the material we have been covering and it is a way for them to show me they know the material rather than just taking an exam.

### **How it Will Be Used in Classroom**

Assessing in the classroom is something I want to do daily. It might not be a document that my students hand in, but through observation and discussion I will be assessing my students to see if they are comprehending the information being presented to them. It is important that as a teacher I am aware of where my students are because if they are not understanding the material, moving on will only make the information more confusing to them. That is why I plan to do both formal and informal assessments so I can gauge how much time we need to spend on certain topics.

### **Conclusion**

As a preservice teacher, it is important to the education of my future students that I understand these nine themes and what they are made up of. Each theme has a purpose and is what is going to lead me in the direction of becoming the effective teacher that I strive to be. Throughout the course of the class, I have learned what it means to be an effective teacher as well as how to apply these different aspects into the classroom.

What I have taken away from this class is that mastering these different themes comes with time, practice, and experience. When I have my own classroom filled with students, I will figure out what does and doesn't work with each group I have. It's a process of trial and error; however, I understand the importance of applying these themes into the classroom because they are going to help me build my students into successful beings. The field of education comes with its challenges, but the challenges are well worth it when you see the outcome. This is the exact reason I want to teach; I want to help students reach their full potential, and these nine themes are going to help me do so.

References

L Borich, Gary D. (2017). *Effective teaching methods: Research based practice*. University of Texas at Austin: Pearson Education, Inc.

## Appendix A

**The Learner and Learning**

*Standard #1: Learner Development.* The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences. [Chapters 2, 6, 7, 11]

*Standard #2: Learning Differences.* The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards. [Chapters 1, 2, 11, 12]

*Standard #3: Learning Environments.* The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation. [Chapters 3, 7, 8, 10, 11]

**Content Knowledge**

*Standard #4: Content Knowledge.* The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content. [Chapters 5, 6, 9, 13]

*Standard #5: Application of Content.* The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues. [Chapters 1, 2, 10, 12]

**Instructional Practice**

*Standard #6: Assessment.* The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making. [Chapters 5, 6, 13]

*Standard #7: Planning for Instruction.* The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context. [Chapters 2, 5, 6, 7]

*Standard #8: Instructional Strategies.* The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways. [Chapters 8, 9, 10, 11, 12]

**Professional Responsibility**

*Standard #9: Professional Learning and Ethical Practice.* The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner. [Chapters 1, 2, 4, 6]

*Standard #10: Leadership and Collaboration.* The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession. [Chapters 2, 3, 4, 13]

Each standard is accompanied by specific professional attitudes and dispositions that can assure its smooth and seamless application. For example, the teacher is expected to implement Standard 2, Learning Differences, in the context of the belief or disposition that all children can learn at high

Appendix B

# All About Me

**My Family**

Age \_\_\_\_\_ Birthday \_\_\_\_\_


<h2 style="color: green;">Favorites</h2> <p>Subject _____</p> <p>Activity _____</p> <p>Food _____</p> <p>Movie _____</p>	<h2 style="color: green;">My School...</h2> <p>Strength _____</p> <p>Weakness _____</p> <p>Goals 1. _____</p> <p>2. _____</p>
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Anything else you feel I should know about you?

\_\_\_\_\_

\_\_\_\_\_

back to school

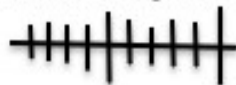




Appendix C

<p><b>Grade: 3rd</b></p>	<p><b>Subject: Math</b></p>
<p><b>Materials:</b> 1. Tape</p>	<p><b>Technology Needed:</b> N/A</p>
<p><b>Instructional Strategies:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Direct instruction</li> <li><input type="checkbox"/> Guided practice</li> <li><input type="checkbox"/> Socratic Seminar</li> <li><input type="checkbox"/> Learning Centers</li> <li><input type="checkbox"/> Lecture</li> <li><input type="checkbox"/> Technology integration</li> <li><input type="checkbox"/> Other (list)</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> Peer teaching/collaboration/cooperative learning</li> <li><input type="checkbox"/> Visuals/Graphic organizers</li> <li><input type="checkbox"/> PBL</li> <li><input type="checkbox"/> Discussion/Debate</li> <li><input type="checkbox"/> Modeling</li> </ul>	<p><b>Guided Practices and Concrete Application:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Large group activity</li> <li><input type="checkbox"/> Independent activity</li> <li><input type="checkbox"/> Pairing/collaboration</li> <li><input type="checkbox"/> Simulations/Scenarios</li> <li><input type="checkbox"/> Other (list)</li> </ul> <p>Explain:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hands-on</li> <li><input type="checkbox"/> Technology integration</li> <li><input type="checkbox"/> Imitation/Repeat/Mimic</li> </ul>
<p><b>Standard(s)</b> 3.NBT.1 – Use place value understanding to round whole numbers to the nearest 10 or 100.</p>	<p><b>Differentiation</b></p> <p><b>Below Proficiency:</b></p> <ul style="list-style-type: none"> <li>• Students will be partnered in groups where an above proficiency student can help the below proficiency student.</li> </ul> <p><b>Above Proficiency:</b></p> <ul style="list-style-type: none"> <li>• These students will be encouraged to help those students who are below proficiency by guiding them and explaining concepts to them while in groups.</li> <li>• These students will also be challenged with more challenging numbers.</li> </ul> <p><b>Approaching/Emerging Proficiency:</b></p> <ul style="list-style-type: none"> <li>• These students will be challenged to use place value to round to the nearest 10 or 100.</li> </ul> <p><b>Modalities/Learning Preferences:</b></p> <ul style="list-style-type: none"> <li>• <b>Visual:</b> A number line will be placed in the room for the students to refer to. There will also be flashcards that the students will be using within their groups that they will look at and determine the place value and visualize rounding to the nearest 10 or 100.</li> <li>• <b>Auditory:</b> Direction will be told out loud to the students.</li> <li>• <b>Kinesthetic:</b> Students will be able to move around the classroom to utilize their resources.</li> <li>• <b>Tactile:</b> Students will have the opportunity to utilize the number line that will be in the back of the classroom.</li> </ul>
<p><b>Objective(s)</b></p> <ul style="list-style-type: none"> <li>• By the end of the lesson, students will have a basic understanding of place value by using number lines to visualize how rounding to the nearest 10 or 100 is executed.</li> </ul> <p><b>Bloom's Taxonomy Cognitive Level:</b></p> <ul style="list-style-type: none"> <li>• Understand</li> <li>• Apply</li> </ul>	
<p><b>Classroom Management- (grouping(s), movement/transitions, etc.)</b></p> <ul style="list-style-type: none"> <li>• Direct Instruction             <ul style="list-style-type: none"> <li>◦ Listen to teacher</li> <li>◦ Voice at a 0                 <ul style="list-style-type: none"> <li>▪ Can talk when asked or asking a question</li> </ul> </li> </ul> </li> <li>• Guided Practice             <ul style="list-style-type: none"> <li>◦ Don't talk out of turn</li> <li>◦ Be on task</li> <li>◦ Voices no higher than a 1 when discussing</li> </ul> </li> <li>• Moving Around Classroom             <ul style="list-style-type: none"> <li>◦ Walk</li> <li>◦ Voice at a 0</li> <li>◦ No pushing or shoving other students</li> </ul> </li> <li>• Working on Assignment             <ul style="list-style-type: none"> <li>◦ Be on task</li> <li>◦ Talk quietly within groups</li> <li>◦ Write neatly</li> </ul> </li> <li>• Handing in Assignment             <ul style="list-style-type: none"> <li>◦ Write name on it</li> <li>◦ Hand into the correct bin</li> </ul> </li> </ul>	<p><b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b></p> <ul style="list-style-type: none"> <li>• Direct Instruction             <ul style="list-style-type: none"> <li>◦ Students are expected to be good listeners</li> <li>◦ Students are expected not to talk out of turn</li> <li>◦ Students are expected to participate when asked questions</li> <li>◦ Students are expected to be respectful to themselves, the speakers, and other classmates</li> </ul> </li> <li>• Guided Practice             <ul style="list-style-type: none"> <li>◦ Students are expected to answer questions when asked</li> <li>◦ Students are expected to stay on task</li> <li>◦ Students are expected to participate/interact</li> </ul> </li> <li>• Moving Around Room             <ul style="list-style-type: none"> <li>◦ Students are expected to walk</li> <li>◦ Students are expected not to push or hurt other students</li> <li>◦ Students are expected to have their voices at a 0</li> <li>◦ Students are expected to be respectful of other students</li> </ul> </li> <li>• Working on Assignment             <ul style="list-style-type: none"> <li>◦ Students are expected to stay on task</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>o Students are expected to interact with group members</li> </ul>
Minutes	Procedures
4	<b>Set-up/Prep:</b> <ol style="list-style-type: none"> <li>1. Have number line taped out on the floor</li> <li>2. Have pieces of paper and pencils ready</li> <li>3. Make sure flashcards are available</li> </ol>
3	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b> <ol style="list-style-type: none"> <li>1. “Good morning 3<sup>rd</sup> graders! For math today we are going to discuss something called rounding. Have any of you heard about rounding before?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>2. “Well today, we are going to explore what rounding is all about. Can someone tell me what activity we have been working on all year with numbers?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>3. “Correct! We have been working on place value knowing what day of school we are on! We have to understand place value before we can begin to understand what rounding <u>is all</u> about. Now, rounding does not deal with exact numbers, rather we are making the number more convenient, or easier, for us to do calculations with. Are you ready to get started?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> </ol>
15	<b>Explain: (concepts, procedures, vocabulary, etc.)</b> <ol style="list-style-type: none"> <li>1. “We said with rounding that we would have to understand place value first. Does anyone know why that is?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>2. “Perfect! We <u>have to</u> know and understand place value because we have to know what number we are looking at when we round. Today we are going to be looking at 10s and 100s when rounding. I will stress this <u>over and over again</u>, we need to be aware of what number we are referring to when we are rounding. Let’s start with a simple one.”             <ol style="list-style-type: none"> <li>a. Write the number 23 on the board                 <ol style="list-style-type: none"> <li>i. “So today I stated that we are going to be using place value to understand how to round whole numbers to the nearest 10 or 100. What place value do you think we will be using with the number 23?”                     <ol style="list-style-type: none"> <li>b. Allow students time to respond</li> </ol> </li> </ol> </li> </ol> </li> <li>3. “The 10s place value, right. Why is it the 10s place value and not the 100s?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>4. “Because there is no 100s place being represented in this number. Great job! <u>So</u> we have established now that we will be looking at the 10s place value. Something that is important to remember when we are rounding is that we are looking to round it to the nearest 10 in this case. Does anyone know what that means?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>5. “We are looking to see if this number is closer to 20 or 30. When we are rounding by the nearest 10, <u>often times</u> it helps to look at our multiples of 10 because that is what we are counting by. So, I would like everyone to stand up. If you think that this number is closer to 20, stand on the left side of the room. If you think this number is closer to 30, stand on the right side of the room.”             <ol style="list-style-type: none"> <li>a. Allow students to move to a side of the room</li> </ol> </li> <li>6. “For those of you that chose to go to the left side of the room, why did you think that it’s closer to 20?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>7. “And for those of you that chose to go to the right side of the room, why did you think that it’s closer to 30?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond.</li> </ol> </li> <li>8. “Well let’s all take a closer look. Please follow me over to the back of the room where there is a large timeline placed on the carpet. What do you notice about this number line?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>9. “The way it is set up, every fifth one is a little longer than the other ones. I did this because usually when we round, we use multiples of 5 to determine, in this case, if 23 is closer to 20 or 30. So, usually if a number is at a 5 or above, we would round up. If the number is below 5, we would round down. Let’s look at an example. Jake, could I have you stand where 23 would be on this number line please?”             <ol style="list-style-type: none"> <li>a. Have student stand at the correct number</li> </ol> </li> <li>10. “Okay class, so Jake is standing at the number 23. Is Jake standing closer to 20 or 30?”             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>11. “He is standing closer to 20! Great job! Let’s have another volunteer and look at some other examples.”             <ol style="list-style-type: none"> <li>a. Go through some more examples with the class. Repeat this same process.</li> </ol> </li> <li>12. “You guys are doing awesome with understanding rounding. Since you now have a basic understanding of what rounding is, you each will be paired into groups and will be doing a rounding activity. Here’s how it’s going to work. Each of your</li> </ol>



	<p>groups will have a stack of flashcards with different numbers on them. You will each also have a piece of paper. I will write this on the board so you don't forget, but on your paper, you will find that there are two lines to each number. Each member of your group will take a flashcard. The first thing you need to do is write the original number on the first line. Then you will need to round up or down, stating what number it is closer to, the 10s or 100s. Whatever number you are rounding to, that will go on the second blank. Does that make sense? What questions do you have?"</p> <ol style="list-style-type: none"> <li>a. Allow students to ask questions</li> <li>b. Answer any questions the students might have</li> </ol> <p>13. "Alright, I will spit you all into groups and we will get started."</p> <ol style="list-style-type: none"> <li>a. Split students up into groups and have the spread out throughout the room.</li> </ol>
<p>15</p>	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <ol style="list-style-type: none"> <li>1. Each group should be spread out in different areas of the classroom</li> <li>2. Make sure each group member has a piece of paper to write names and answers down on.</li> <li>3. Make sure each group has a stack of flash cards to use for the activity.</li> <li>4. Allow the students to get into their groups and participate in the activity so they can work with one another and learn from one another about rounding.</li> </ol>
<p>5</p>	<p><b>Review (wrap up and transition to next activity):</b></p> <ol style="list-style-type: none"> <li>1. Have the students transition from the activity back to their seats. Make sure the put the cards away and hand in their papers to the hand in space.</li> <li>2. "Thank you all for putting away your materials and bringing your attention back to the front of the room. Just to review, why is it important that we understand rounding?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>3. "Perfect, because sometimes rounding is beneficial and easier for us to do when we <u>do not</u> need the specific number for our calculation or our problem."</li> <li>4. "Was doing this activity beneficial for your understanding of how rounding works? Did working with your classmates help make understanding this concept easier?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond. Feedback on the activity is always helpful</li> </ol> </li> <li>5. "You all did a wonderful job participating. I will leave the number line on the floor in the back of the room so if you ever want to reference it, it will be there for you to use for a while."</li> </ol>
<p><b>Formative Assessment: (linked to objectives, during learning)</b></p> <ul style="list-style-type: none"> <li>• <b>Progress monitoring throughout lesson (how can you document your student's learning?)</b> <ul style="list-style-type: none"> <li>• Observing how students are using the number line</li> <li>• Observing how students are working to together in their groups.</li> </ul> </li> </ul>	<p><b>Summative Assessment (linked back to objectives, END of learning)</b></p> <ul style="list-style-type: none"> <li>• This will be the piece of paper that they hand in at the end of the <u>lesson</u> so I am able to see how they each understood the concept of rounding while they were in their groups.</li> </ul>
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p> <p>Rebekah looked over my lesson plan, and the feedback she provided me was very helpful. There was one area within my plan (that I revised) where she told me it would be beneficial if I worded it different to be more specific for the students to understand. Otherwise, she informed me that my lesson plan is very detailed and scripted out. It would be easy for a sub to go through this and know exactly what to do with my students. She liked how I had different ways of assessing the students rather than having them hand in a worksheet. One other thing she told me to be aware of is time. Although she did say she thinks my timing is realistic, it's just the fact that I had everything scripted out to where it seemed like it would be longer. It was just something she wanted me to keep in mind. Overall, it was very nice to receive someone's feedback on my lesson. It is helpful to know what areas to improve for the next one.</p>	

## Appendix D

## Interdisciplinary Plan

Grade: 3

Unit Topic: Cinco de Mayo

Course/Subject: Interdisciplinary

Approximate Time Required: 2 weeks

1) Main Purpose of Unit

The purpose of this unit is to familiarize students with the excitement, the history, and the traditions that are observed by the people of Mexico during this widely celebrated holiday.

2) Performance Standards

- a) Music - MU:Co11.2a. Explain how the arts reflect cultural trends and historical events across the world and how new directions in the arts have emerged.
- b) MU:Pr4.1.3.a Demonstrate and explain *how the selection of music to perform is influenced by personal interest, knowledge, purpose, and context.*
- c) MU:Pr4.2.3.a Demonstrate *understanding of the structure* in music selected for performance.
- d) English - 3.L.4d - Determine or clarify the meaning of unknown and multiple meaning words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. ~~d~~ Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases
- e) English: 3.W.4 Produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3.)
- f) Geography/Science
  - Performance Standard: 3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.
  - Performance Standard 3-ESS2-1: Represent data in tables and graphical displays to describe and predict typical weather conditions expected during a particular season.
- g) Social Studies -
  - A. Social studies/ History 3.1.6: the students will look at a simple timeline and look at the importance of where Cinco De Mayo falls.
  - B. Social studies/ History 3.1.7:Generally understand where Mexico is on a map (northern versus southern hemisphere)
  - C. Social studies/ History 3.1.3: Students will, using resources like the timeline they already looked at, will research the greater importance of Cinco De Mayo and why it is celebrated.
  - D. Social studies/ History 3.1.4: Students will look at current events in Mexico.

3) Performance Objectives

The student will be able to:

- a) Music - Sing Cinco De Mayo song and play instruments with song. Also understand what Cinco De Mayo is and what it means to Mexico.
- b) English - Understand vocabulary words relating to this celebration as well as their importance.
- c) English - Apply their knowledge of key terms and produce a writing that highlights those terms in an organized manner.
- d) Geography/Science - Understand the climate of Central America/Mexico and what particular weather phenomena are common there. Students will become familiar with the climate of Central America and be able to describe the causes of

the climate in this particular region. Students will obtain information about the weather in Mexico and make predictions about weather for the coming season.

- e) Social Studies - Understand where Mexico is on a map and understand the importance Cinco De Mayo has on history and where it falls on a timeline.
- f) Social Studies- Apply their knowledge to making a timeline from the time before Cinco De Mayo happened to a couple years after it occurred.

#### 4) Content Outline:

- a) Music -
  - i) Sing Cinco de Mayo song
  - ii) Introduce instruments
  - iii) Compose accompaniment to play with song
  - iv) Sing song with accompaniment
- b) English - Key terms and their usage
  - i) Vocabulary
  - ii) Writing samples
  - iii) Visual representations
- c) Geography/Earth Science
  - I. Maps
  - II. Tracking weather patterns in Mexico
  - III. Research
  - IV. Topographical representations
- d) Social Studies
  - i. Timelines
  - ii. Past events
  - iii. Current events
  - iv. Map of Mexico

#### 5) Procedures and Activities

- a. Music
  - i. Sing Cinco de Mayo song
  - ii. Discuss its meaning
  - iii. Teach students how to play instruments
  - iv. Let students compose a accompaniment
  - v. Song song with accompaniment
- b. English
  - i. Read aloud
  - ii. Discussion
  - iii. Writing/journaling
- c. Geography/Earth Science
  - I. Make a large map of Mexico
  - II. Look up weather conditions in Mexico and gather data over a period of time to make predictions about weather for the season.
  - III. Study and make representations of topography of hills and valleys, and bodies of water using clay, water, rocks, ect.
- d. Social Studies
  - i. Look at a general timeline
  - ii. Discus what a timeline represents
  - iii. Making a timeline
  - iv. Look at a map

#### 6) Instructional Aids and Resources

- a) Visual aids/representations
  - i. Maps
  - ii. Timelines
  - iii. Sheet music
  - iv. Globe
  - v. dictionaries
  - vi. Example journal
  - vii. Cultural books
  - Viii. Vocabulary cards
- b) Materials/ incentives
  - i. Mexican instruments and Cinco de Mayo song
  - ii. New journal books/ colorful pens
  - iii. Maps and paper to make maps
- c) Online resources and materials
  - i. weather/radar website
  - li. topographical maps
  - lii. Art materials for making maps
  - IV. Weather charts

## 7) Assessment/Evaluation

- a. Create a rubric.
  - Observe how they have made their timelines and if they have done them accurately
  - (Music) Observe how well they compose accompaniment for song and how well they participate and sing with it.
- b. Journal entries- look through journal entries to assess writing
- c. Geography/Earth Science
  - Create a rubric
    - Assess how accurately their projects represent the topographical maps
    - Compare their weather charting to your own

## Appendix E

<b>Grade: 4th</b>		<b>Subject: Social Studies</b>	
<b>Materials:</b> 1. iPads 2. Green Screen 3. Laptops 4. Pencils/Paper 5. Stand for Laptop 6. Bucket for Strips of Paper		<b>Technology Needed:</b> 1. iPads 2. Laptops	
<b>Instructional Strategies:</b> <input type="checkbox"/> Direct instruction <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list) <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> PBL <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Modeling		<b>Guided Practices and Concrete Application:</b> <input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain: <input type="checkbox"/> Hands-on <input type="checkbox"/> Technology integration <input type="checkbox"/> Imitation/Repeat/Mimic	
<b>Standard(s)</b> 4.2.1 Identify the symbols (i.e., bird, flower, flag, tree) that represent North Dakota		<b>Differentiation</b>	
<b>Objective(s)</b> By the end of the lesson, students will research and summarize key symbols of North Dakota through the use of green screen technology.		<b>Below Proficiency:</b> • Students will be partnered in groups where an above proficiency student can help the below proficiency student.	
<b>Bloom's Taxonomy Cognitive Level:</b> • Evaluation • Analysis • Application		<b>Above Proficiency:</b> • These students will be asked to look for connections with the material rather than just writing down the facts.	
		<b>Approaching/Emerging Proficiency:</b> • These students will also be challenged to make connections and perhaps help explain concepts and work with those who are below proficiency to work on their communication skills.	
		<b>Modalities/Learning Preferences:</b> • <b>Visual:</b> The green screen will act as a type of visual for the students. • <b>Auditory:</b> Directions will be told out loud to the students • <b>Kinesthetic:</b> Students will be moving around the classroom and to a different room with this activity. • <b>Tactile:</b>	
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> • Direct Instruction o Listen to teacher o Voice at a 0 ▪ Can talk when asked or asking a question • Moving Around Classroom o Walk o Voice at a 0 o No pushing or shoving other students • Working on Assignment o Work with group members o Voice no higher than a 2 o Make sure information is organized and easy to read • Handing in Assignment o Students will upload for teacher to see		<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b> • Direct Instruction o Students are expected to be good listeners o Students are expected not to talk out of turn o Students are expected to participate when asked questions o Students are expected to be respectful to themselves, the speakers, and other classmates • Moving Around Room o Students are expected to walk o Students are expected not to push or hurt other students o Students are expected to have their voices at a 0 o Students are expected to be respectful of other students • Working on Assignment o Students are expected to stay on task o Students are expected to interact with group members	
<b>Minutes</b>	<b>Procedures</b>		
<b>2</b>	<b>Set-up/Prep:</b> 1. Make sure all technology is available 2. Have green screen and iPad ready to go to record 3. Have guidance papers for research ready to give to the students		

2	<p><b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b></p> <ol style="list-style-type: none"> <li>1. "Hello fourth graders! By a show of hands, how many of you know some of North Dakota's state symbols?"             <ol style="list-style-type: none"> <li>a. Allow students to show hands</li> <li>b. If students know some symbols, allow them to share ones they know.</li> </ol> </li> <li>2. "Today we are going to do an introduction activity to the different symbols that are important to our state of North Dakota. Being this is an introductory activity, this is something we are going to be moving through a little fast to make sure we can get everything done; therefore, I need to have everyone's attention on me so we can get going."</li> </ol>
5-7	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <ol style="list-style-type: none"> <li>1. "As I stated, we are going to be looking at some state symbols that are unique to our state. Here is what we are going to do. We are going to split up into groups. I will be drawing sticks for the groups. You will also see that I have this little bucket. This little bucket has some symbol of North Dakota written on it. You group will each draw one piece of paper so you know what symbol you will be working on. Does this make sense so far?"             <ol style="list-style-type: none"> <li>a. Allow students to respond</li> </ol> </li> <li>2. "Perfect. Moving on, <u>When</u> everyone has a piece of paper with their symbol on it, I will be passing out this piece of paper. One this piece of paper you will notice that it has questions for your groups to search so you know more about that <u>particular symbol</u>. This piece of paper is going to act as a script for you, because once <u>ALL</u> of your information is collected, we are going to turn this into a video using a green screen. Are you all still with me?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>3. "This is why we all need to work together because the time we have for this activity is going to go fast. And remember, it is just an introduction to the information, so it's not a requirement to gather a bunch of information on your symbol. There are just a couple things I want your groups to look at. When you have <u>all of</u> your information, you need to assign different parts of your script to your team members. This <u>has to</u> be a group project. Not one person can be doing all the work. It would be a good idea if you split the research up between group member, and then decide who is staying what. Each group member needs to play a role in this assignment. When you present, it should only be no more than 3 minutes. What questions do you have about this before I continue?"             <ol style="list-style-type: none"> <li>a. Allow students to ask questions</li> <li>b. Answer them as they ask them</li> </ol> </li> <li>4. "One more thing before you get started, for the green screen, your picture needs to be of your symbol. It can't just be something random. We will watch each of these videos tomorrow in <u>class</u> so we have an idea of what these symbols mean. What other clarifications do you need?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> </ol>
25-30	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <ol style="list-style-type: none"> <li>1. Allow time for the students to gather their information on whichever symbol their group received</li> <li>2. Walk around the room, make sure each group is on task.</li> <li>3. The green screen will be in another room; therefore, it would be a good idea to have someone (if they are free) in that room monitoring the students to make sure they are on task as well.</li> </ol>
5	<p><b>Review (wrap up and transition to next activity):</b></p> <ol style="list-style-type: none"> <li>1. Let the students know they have a few minutes to finish up where they are at, then they need to start putting everything away and return to their seats.</li> <li>2. "Alright class, I know we are going to be reviewing these tomorrow, but did you learn something about North Dakota that you didn't know before?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>3. "Was this activity beneficial to your understanding of the symbols of North Dakota?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>4. "Awesome, well you all did a great job of staying on task. I appreciate the hard work. Make sure everything is put away so we can move on to our next lesson."             <ol style="list-style-type: none"> <li>a. Make sure students have everything put away</li> </ol> </li> </ol>
<p><b>Formative Assessment: (linked to objectives, during learning)</b></p> <ul style="list-style-type: none"> <li>• Progress monitoring throughout lesson (how can you document your student's learning?)             <ul style="list-style-type: none"> <li>• For a formative assessment, I would be observing the students to make sure they are working in their groups as they were told.</li> <li>• I could also use the guidance sheet as a type of formative assessment for documenting their learning.</li> </ul> </li> </ul>	<p><b>Summative Assessment (linked back to objectives, END of learning)</b></p> <ul style="list-style-type: none"> <li>• The summative assessment would be the final presentation with the green screen that they turn in.</li> </ul>
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p>	



Appendix F

<p><b>Grade: 4th</b></p> <p><b>Materials:</b></p> <ol style="list-style-type: none"> <li>iPads</li> <li>Green Screen</li> <li>Laptops</li> <li>Pencils/Paper</li> <li>Stand for Laptop</li> <li>Bucket for Strips of Paper</li> </ol>	<p><b>Subject: Social Studies</b></p> <p><b>Technology Needed:</b></p> <ol style="list-style-type: none"> <li>iPads</li> <li>Laptops</li> </ol>
<p><b>Instructional Strategies:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Direct instruction</li> <li><input type="checkbox"/> Guided practice</li> <li><input type="checkbox"/> Socratic Seminar</li> <li><input type="checkbox"/> Learning Centers</li> <li><input type="checkbox"/> Lecture</li> <li><input type="checkbox"/> Technology integration</li> <li><input type="checkbox"/> Other (list)</li> <li><input type="checkbox"/> Peer teaching/collaboration/cooperative learning</li> <li><input type="checkbox"/> Visuals/Graphic organizers</li> <li><input type="checkbox"/> PBL</li> <li><input type="checkbox"/> Discussion/Debate</li> <li><input type="checkbox"/> Modeling</li> </ul>	<p><b>Guided Practices and Concrete Application:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Large group activity</li> <li><input type="checkbox"/> Independent activity</li> <li><input type="checkbox"/> Pairing/collaboration</li> <li><input type="checkbox"/> Simulations/Scenarios</li> <li><input type="checkbox"/> Other (list)</li> <li><input type="checkbox"/> Hands-on</li> <li><input type="checkbox"/> Technology integration</li> <li><input type="checkbox"/> Imitation/Repeat/Mimic</li> </ul> <p>Explain:</p>
<p><b>Standard(s)</b></p> <p>4.2.1 Identify the symbols (i.e., bird, flower, flag, tree) that represent North Dakota</p> <p><b>Objective(s)</b></p> <p>By the end of the lesson, students will research and summarize key symbols of North Dakota through the use of green screen technology.</p> <p><b>Bloom's Taxonomy Cognitive Level:</b></p> <ul style="list-style-type: none"> <li>• Evaluation</li> <li>• Analysis</li> <li>• Application</li> </ul>	<p><b>Differentiation</b></p> <p><b>Below Proficiency:</b></p> <ul style="list-style-type: none"> <li>• Students will be partnered in groups where an above proficiency student can help the below proficiency student.</li> </ul> <p><b>Above Proficiency:</b></p> <ul style="list-style-type: none"> <li>• These students will be asked to look for connections with the material rather than just writing down the facts.</li> </ul> <p><b>Approaching/Emerging Proficiency:</b></p> <ul style="list-style-type: none"> <li>• These students will also be challenged to make connections and perhaps help explain concepts and work with those who are below proficiency to work on their communication skills.</li> </ul> <p><b>Modalities/Learning Preferences:</b></p> <ul style="list-style-type: none"> <li>• <b>Visual:</b> The green screen will act as a type of visual for the students.</li> <li>• <b>Auditory:</b> Directions will be told out loud to the students</li> <li>• <b>Kinesthetic:</b> Students will be moving around the classroom and to a different room with this activity.</li> <li>• <b>Tactile:</b></li> </ul>
<p><b>Classroom Management- (grouping(s), movement/transitions, etc.)</b></p> <ul style="list-style-type: none"> <li>• Direct Instruction             <ul style="list-style-type: none"> <li>◦ Listen to teacher</li> <li>◦ Voice at a 0                 <ul style="list-style-type: none"> <li>▪ Can talk when asked or asking a question</li> </ul> </li> </ul> </li> <li>• Moving Around Classroom             <ul style="list-style-type: none"> <li>◦ Walk</li> <li>◦ Voice at a 0</li> <li>◦ No pushing or shoving other students</li> </ul> </li> <li>• Working on Assignment             <ul style="list-style-type: none"> <li>◦ Work with group members</li> <li>◦ Voice no higher than a 2</li> <li>◦ Make sure information is organized and easy to read</li> </ul> </li> <li>• Handing in Assignment             <ul style="list-style-type: none"> <li>◦ Students will upload for teacher to see</li> </ul> </li> </ul>	<p><b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b></p> <ul style="list-style-type: none"> <li>• Direct Instruction             <ul style="list-style-type: none"> <li>◦ Students are expected to be good listeners</li> <li>◦ Students are expected not to talk out of turn</li> <li>◦ Students are expected to participate when asked questions</li> <li>◦ Students are expected to be respectful to themselves, the speakers, and other classmates</li> </ul> </li> <li>• Moving Around Room             <ul style="list-style-type: none"> <li>◦ Students are expected to walk</li> <li>◦ Students are expected not to push or hurt other students</li> <li>◦ Students are expected to have their voices at a 0</li> <li>◦ Students are expected to be respectful of other students</li> </ul> </li> <li>• Working on Assignment             <ul style="list-style-type: none"> <li>◦ Students are expected to stay on task</li> <li>◦ Students are expected to interact with group members</li> </ul> </li> </ul>
<p><b>Minutes</b></p> <p>2</p>	<p><b>Procedures</b></p> <p><b>Set-up/Prep:</b></p> <ol style="list-style-type: none"> <li>Make sure all technology is available</li> <li>Have green screen and iPad ready to go to record</li> <li>Have guidance papers for research ready to give to the students</li> </ol>

2	<p><b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b></p> <p><b>Purposes of Questions</b></p> <p><b>Levels of Cognitive Complexity</b></p> <ol style="list-style-type: none"> <li>1. "Hello fourth graders! By a show of hands, how many of you know some of North Dakota's state symbols?" (1. Getting interest and attention)             <ol style="list-style-type: none"> <li>a. Allow students to show hands</li> <li>b. If students know some symbols, allow them to share ones they know.</li> </ol> </li> <li>2. "Looks like we have a few of you who have heard of some. To get our minds going, lets identify some of the symbols our state of North Dakota has (1. Knowledge)"             <ol style="list-style-type: none"> <li>a. Allow students time to respond and identify some of the symbols of North Dakota that they know.</li> </ol> </li> <li>3. "Today we are going to do an introduction activity to the different symbols that are important to our state of North Dakota. Being this is an introductory activity, this is something we are going to be moving through a little fast to make sure we can get everything done; therefore, I need to have everyone's attention on me so we can get going."</li> </ol>
5-7	<p><b>Explain: (concepts, procedures, vocabulary, etc.)</b></p> <ol style="list-style-type: none"> <li>1. "As I stated, we are going to be looking at some state symbols that are unique to our state. Up to this point, we have discussed important aspects that are unique to North Dakota. In your own words, summarize what we have been discussing about North Dakota this past week? (2. Comprehension)"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>2. "Exactly! That was a great summary of what we have been discussing. Here is what we are going to do. We are going to split up into groups. I will be drawing sticks for the groups. You will also see that I have this little bucket. This little bucket has some symbol of North Dakota written on it. Your group will each draw one piece of paper so you know what symbol you will be working on. Does this make sense so far?"             <ol style="list-style-type: none"> <li>a. Allow students to respond</li> </ol> </li> <li>3. "Perfect. Moving on, when everyone has a piece of paper with their symbol on it, I will be passing out this piece of paper. On this piece of paper you will notice that it has questions for your groups to search so you know more about that particular symbol. This piece of paper is going to act as a script for you, because once ALL of your information is collected, you will have a few options to choose from. You can either use a green screen to bring your symbol to life, or you can think of a different way to present your symbol, such as drawing or creating something else (5. Synthesis). Where have you seen a green screen used before?" (2. Diagnosing and checking) What do you know about green screens?" (3. Recalling specific facts of information)             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>4. "Great! It's nice to know that some of us have seen the green screen used before. Can you relate the use of the green screen to other purposes?" (4. Analysis)             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> <li>5. "This is why we all need to work together because the time we have for this activity is going to go fast. And remember, it is just an introduction to the information, so it's not a requirement to gather a bunch of information on your symbol. There are just a couple things I want your groups to look at. When you have all of your information, you need to assign different parts of your script to your team members. This has to be a group project. Not one person can be doing all the work. It would be a good idea if you split the research up between group member, and then decide who is staying what. Each group member needs to play a role in this assignment. When you present, it should only be no more than 3 minutes. What questions do you have about this before I continue?" Is everyone still understanding what I am asking of you to do?" (4. Managing)             <ol style="list-style-type: none"> <li>a. Allow students to ask questions</li> <li>b. Answer them as they ask them</li> </ol> </li> <li>6. "One more thing before you get started, for the green screen, your picture needs to be of your symbol. It can't just be something random. We will watch each of these videos tomorrow in class so we have an idea of what these symbols mean. What other clarifications do you need?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> </ol>
25-30	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <ol style="list-style-type: none"> <li>1. Allow time for the students to gather their information on whichever symbol their group received</li> <li>2. Walk around the room, make sure each group is on task.</li> <li>3. The green screen will be in another room; therefore, it would be a good idea to have someone (if they are free) in that room monitoring the students to make sure they are on task as well.</li> </ol>
5	<p><b>Review (wrap up and transition to next activity):</b></p> <ol style="list-style-type: none"> <li>1. Let the students know they have a few minutes to finish up where they are at, then they need to start putting everything away and return to their seats.</li> <li>2. "Alright class, I know we are going to be reviewing these tomorrow, but did you learn something about North Dakota that you didn't know before?"             <ol style="list-style-type: none"> <li>a. Allow students time to respond</li> </ol> </li> </ol>

3. "Now that you've had the chance to experiment with the green screen, do you understand how the green screen actually works?" (5. Encouraging higher-level thought processes)
  - a. Allow students time to respond
4. "You have all had the chance to explore a little about the symbols of North Dakota?"
  - a. Allow students time to respond
5. "With the experience you have now had with the green screen, can you make other connections as to where they have been used and what other uses they may have?" (6. Structuring and redirecting learning)
6. "Awesome, well you all did a great job of staying on task. I appreciate the hard work. What other questions do you have about green screens and their uses?" (7. Allowing expression of affect)
  - a. Allow students time to respond
7. "Now that you have had the opportunity to look at these different symbols within our state, what worth or what is the purpose that we have these different symbols within North Dakota? How are these symbols used within our state? (6. Evaluation)
  - a. Allow students time to respond
8. "Although we have briefly looked at these symbols, can you apply this knowledge that you've gained to this history of North Dakota as well as the present day? (3. Application) Would the information you gathered about our state help you decide where you want to live or where you want to visit? These are things that contribute to the uniqueness of each state."
9. Make sure everything is put away so we can move on to our next lesson."
  - a. Make sure students have everything put away

**Formative Assessment (linked to objectives, during learning)**

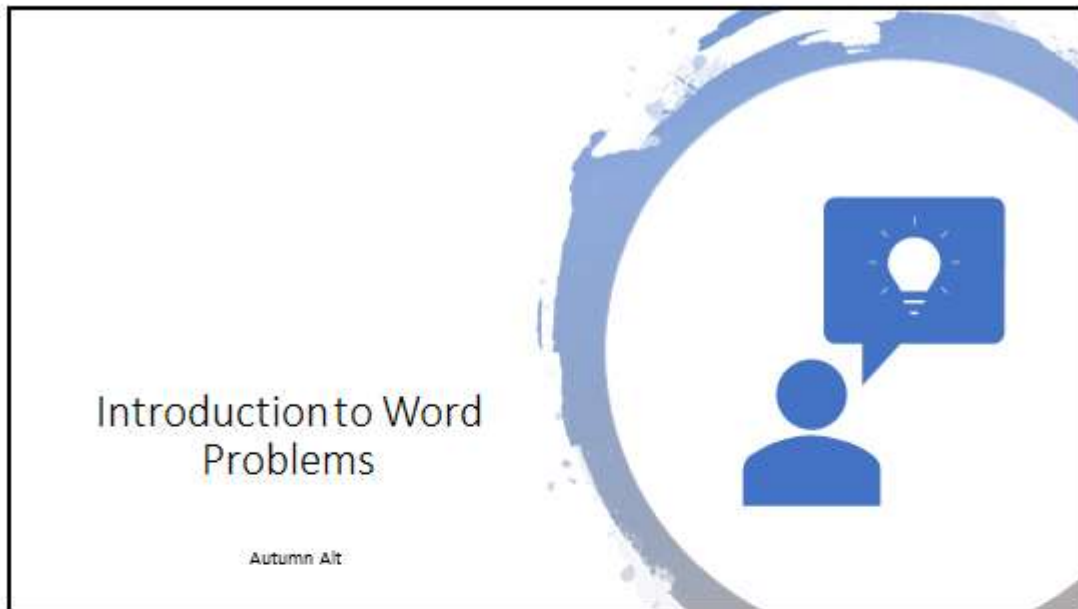
- Progress monitoring throughout lesson (how can you document your student's learning?)
  - For a formative assessment, I would be observing the students to make sure they are working in their groups as they were told.
  - I could also use the guidance sheet as a type of formative assessment for documenting their learning.

**Summative Assessment (linked back to objectives, END of learning)**

- The summative assessment would be the final presentation with the green screen that they turn in.

**Reflection (What went well? What did the students learn? How do you know? What changes would you make?):**

## Appendix G



1

Standard: 2.OA.1 Use strategies to add and subtract within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Objective: By the end of the lesson, students will use visualization strategies to solve word problems.

Standard and Objective

2



Word Problems

- Help us solve real life situations
- Work on our adding and subtracting skills
- Works on our problem solving and critical thinking skills

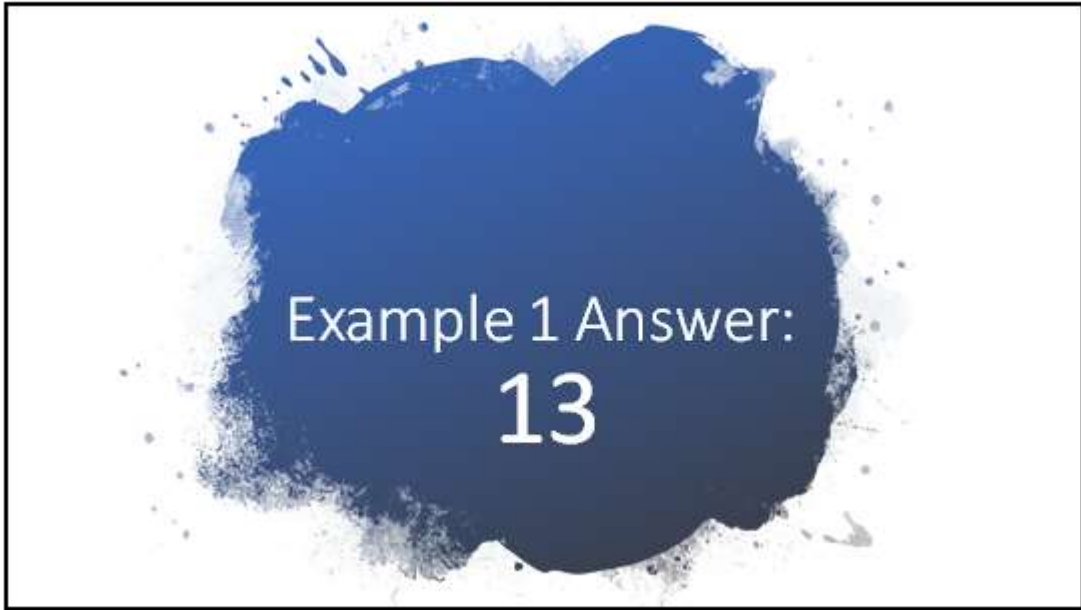
3

### Example 1

- Katie and Jack are selling cookies at their mom's garage sale. The first day they sold 7 cookies. During the second day, Katie and Jack sold 6 cookies. How many cookies did they sell in total?



4



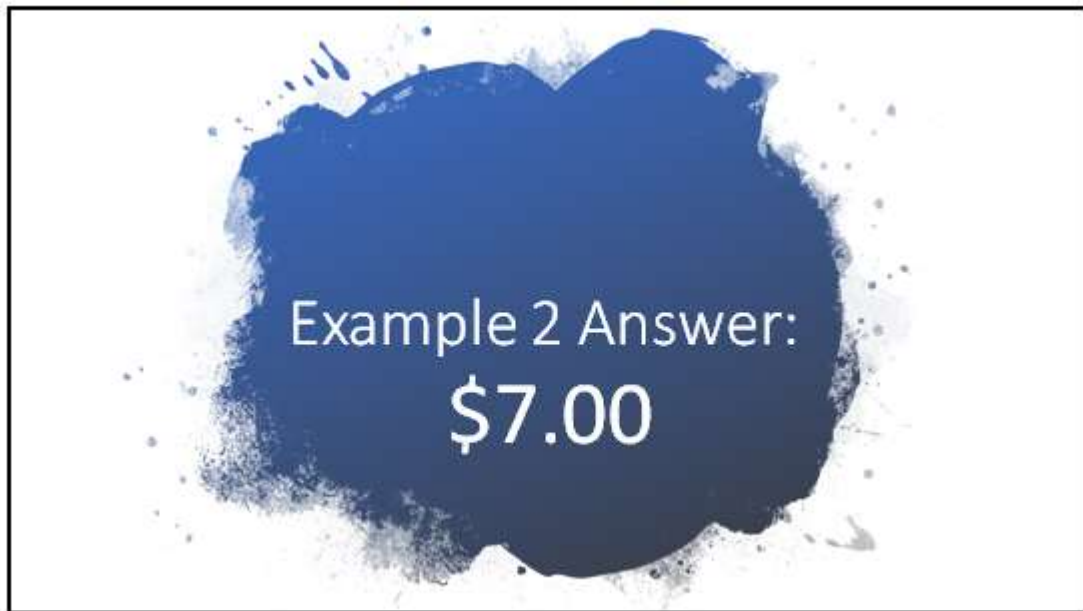
5

### Example 2


- Jackie went to the grocery store to buy some ingredients to make for supper. She left the house with \$20. She bought milk for \$3, cheese for \$6, and noodles for \$4. How much money does Jackie have left?

The image shows three items with their costs represented by green bars: a milk carton with 3 bars, a wedge of cheese with 6 bars, and a bowl of noodles with 4 bars. To the right is a circular icon of a shopping cart.

6



7



### Now You Try

- Tommy and Lucy planted 21 flowers on Monday. On Thursday they planted some more flowers. There are now 54 flowers that have been planted. How many flowers did Tommy and Lucy plant on Thursday?

8

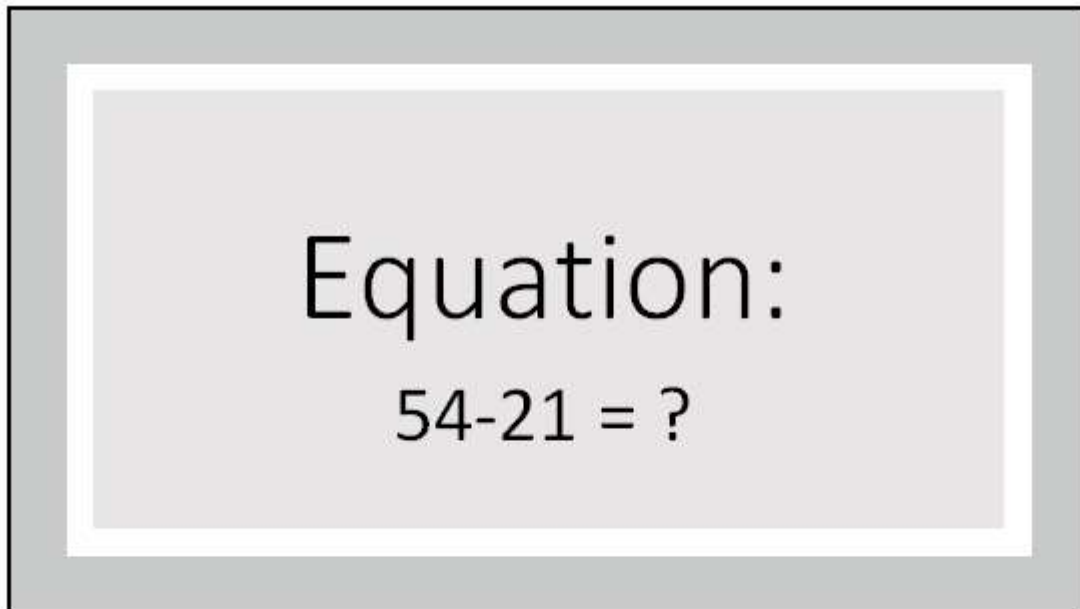


9



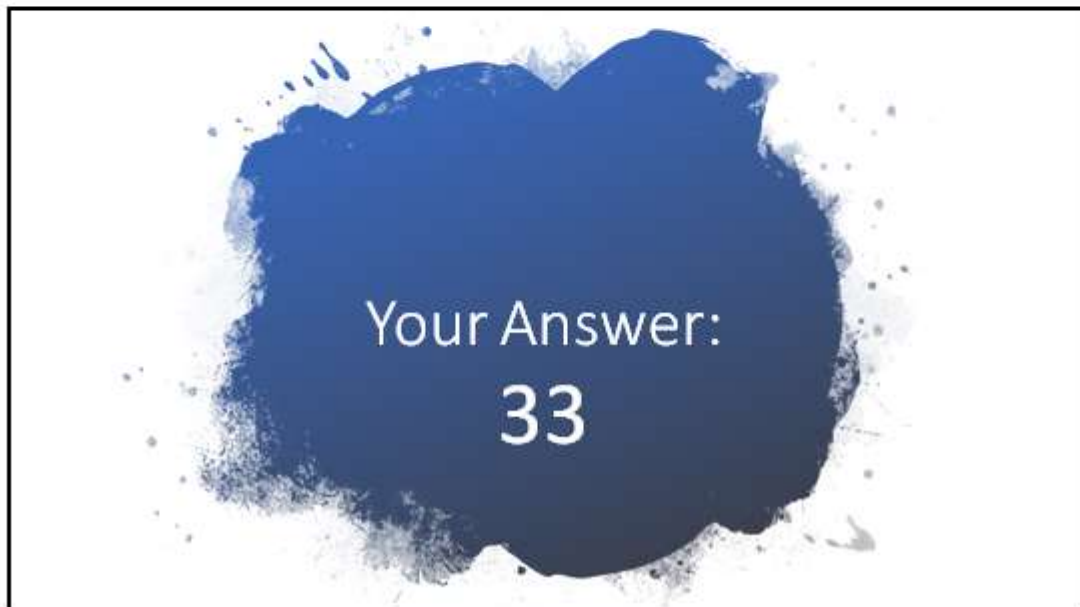
10



A rectangular slide with a light gray background and a white border. The text is centered and reads "Equation:" followed by the equation "54-21 = ?".

Equation:  
 $54-21 = ?$

11

A rectangular slide with a white background and a black border. The text is centered and reads "Your Answer:" followed by the number "33". The text is overlaid on a dark blue, ink-splattered graphic.

Your Answer:  
**33**

12

Appendix H

# Mickey's Market

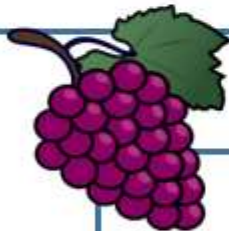


Dairy		
	Regular	Organic
Milk:	\$2.25	\$3.50
Cheese:	\$3.50	<u>\$3.75</u>
Yogurt:	\$5.00	\$5.75

Noodles	
Bowtie:	\$4.50
Spaghetti:	\$2.75
Macaroni:	\$3.25

Breads	
6 Buns:	\$3.75
Whole Wheat:	\$4.50
White:	\$3.75
Hamburger:	\$4.25
Hot Dog:	\$4.25

Condiments	
Ketchup:	\$3.25
Mustard:	\$3.75
Barbeque:	\$3.00
Ranch:	\$4.25



Fruits	
Apples:	\$4.00
Bananas:	\$2.75
Grapes:	\$3.75
Strawberries:	\$4.25

Vegetables	
Cucumber:	\$3.25
Lettuce:	\$2.75
Carrots:	\$4.00
Broccoli:	\$3.75



## Appendix I

### Performance Based Assessment

When I created my summative assessment, I based it off of facts about North Dakota's history. What I would do to turn this into a performance assessment is have the students create a newspaper that is based off of the different time periods of North Dakota that we discussed in class. Being this assessment is based on a fourth-grade level, I would have the students in designated groups. Each person would have to look up a particular event that occurred within the time period they are given. After their information is collected, they then start working together to create their section of the newspaper. When each group of students has finished their sections, the students will then peer review the articles they created to see if they notice any errors or if the wording is confusing to them. As the teacher, I will also probably be looking at the work they are creating to make sure they are on the right track. After the review and editing process, the students will then work together to create one newspaper article by combining all of their research into different headings.

Once the students have compiled all of their information and the newspaper has been put together, not only will they hand their final project in, but the class will also present copies of their newspaper around the school for other students and faculty members to grab, take home, and read. This way the work that the students have put into this is being presented to the public and being shared with others.

This would be an assignment where a rubric would be required so the students have guidelines to follow. The rubric is shown below.

<b>North Dakota Student Newspaper Rubric</b>				
	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Satisfactory (2)</b>	<b>Needs Improvement (1)</b>
<b>Topic</b>	Topic is clearly stated	Topic is introduced.	Topic is introduced but the focus is unclear.	Topic is not clearly stated
<b>Evidence</b>	Thoroughly backs up topic with specific facts and details	Supports topic with facts and details	Attempts to support the topic with facts and details	Little to no facts or details to support the topic.
<b>Organization</b>	Newspaper article has a new paragraph for each new thought.	Newspaper article has a new paragraph for most new thoughts.	Newspaper article has some new paragraphs for new thoughts.	Newspaper article does not have new paragraphs for each new thought.
<b>Structure</b>	Article has a header along with a clear beginning, middle, and end.	Article has a header but some points of beginning, middle, and end are unclear.	Article includes a header, but the beginning, middle, and end is incomplete.	Article has no header or a clear beginning, middle, or end.
<b>Spelling/Grammar</b>	Newspaper article has no spelling or grammatical errors.	Newspaper article has 1-2 spelling or grammatical errors.	Newspaper article has 3-4 spelling or grammatical errors.	Newspaper article has 5+ spelling or grammatical errors.