

Signature Assessment

0 0 0 Last Updated: 2:27PM Today Shared: Individual (1)

About This Lesson

DESCRIPTION

[Age and Grade Level]

[Content Area]

The lesson will be conducted in a second grade classroom (students are 7-8 years old) during the allotted time for math instruction. The classroom has 20 students. Each student has their own device (laptop) which can be used during instruction. Students have access to materials in the classroom (markers, scissors, etc.) The teacher also has an interactive SmartBoard available. [Available Technology] [Description of 4 Case Study Student 'Types' (HI, LI, ELL, GT) - including BOTH Strengths and Weaknesses] Alex has dyslexia (high incidence disability). His teacher has noticed he has poor handwriting and has difficulty holding a pencil properly. He has difficulty reading written text and struggles with comprehension of word problems. Often times he leaves word problems blank because he cannot read the problem. When Alex has the directions read aloud to him, he is successful. Alex is able to answer questions verbally when given the chance to express his thought process aloud. He is an active participant in class discussions and enjoys sharing his answers and ideas with his classmates.

Betty has a hearing impairment (low incidence disability). She uses a personal hearing device (a cochlear implant) and has difficulty comprehending instruction and directions when seated further away from the front of the room. Often, Betty needs repeated instructions and visual cues to help her. She is a visual learner and works best when using manipulatives or hands on activities. Betty also has strong reading comprehension skills.

Chris is an English Language Learner who recently moved to the United States from Greece. He struggles with English vocabulary and often misses verbal directions given by the teacher. Chris attends an ESOL class for an hour every other day. When given repeated verbal directions, the student is able to complete the task. The student excels when the assignment is first modeled through hands-on activities.

Debbie has been identified as Gifted and Talented. She scores at a 3rd grade reading and math level. However, she often gets bored during classroom instruction and has difficulty with motivation. This sometimes results in unfinished classwork. Debbie loves to participate in discussions and sharing her ideas with her peers.

PREREQUISITES [Prerequisites Describing Information, Skills, or Resources needed to be Successful]

Students must have a basic understanding of time on an analog clock.

They must be able to distinguish the minute hand from the hour hand.

They must understand telling time to the half hour - which was previously taught in first grade.

Students must be able to correlate time on a digital clock to time on an analog clock.

Students must be able to skip count by 5's.

ESTIMATED TIME

1 hour

Potential Use [Content Area and Associated MD College and Career Ready Standards (MCCRS)]

PURPOSE:	Classroom Instruction, Small Group
GRADES:	2
CONTENT AREAS:	Math
COMMON CORE:	Mathematics <ul style="list-style-type: none"> ▪ Measurement and Data <ul style="list-style-type: none"> Work with time and money. CCSS.Math.Content.2.MD.C.7 (grade 2): Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

Goals

INSTRUCTIONAL GOALS [Goal Aligned with MCCRS and Emphasizes Outcomes NOT Means]

All students will tell and write time from analog and digital clocks using AM and PM.

OBJECTIVES [Objective is SMART, is a Step toward the Goal, Informs Instruction, and Allows for Adjustment]

- Students will be able to demonstrate telling time to the nearest 5 minutes on an analog clock.

VARIABILITY [A Plan to Address Learner Variability throughout Classroom]

*In Brackets, identify the UDL Checkpoints for each Variability Option.

The following options are available for all students.

Options to support Engagement: Students will be greeted at the door every morning and acknowledged by name. As students walk in the classroom, music will be playing signaling students to prepare for the lesson. When the music ends, students know that the lesson is about to begin. There will also be a digital timer on the SmartBoard that counts down until class begins and is used throughout the lesson to help students keep track of time. An appropriate goal/ objective will be listed on the board that relates to the lesson - one student will read the objective for the class. Students will have allotted time for collaborating with a partner to check their answers, individual work as well as whole class discussions in order to foster collaboration throughout the lesson. The teacher will use symbols on the board to indicate when partner work or group work is allowed. Throughout the lesson student choice will be emphasized in their choosing of how to present their answers, whether it is on paper and pencil or using their device or another method. Students will use hand signals to show whether or not they agree or disagree with other students. The teacher will also use call sticks in order to allow several students to come up to the board and share their work.

Options to support Representation: The teacher will give verbal directions but also have them written on the board or SmartBoard for student reference while they complete the activities. The teacher can also project an analog or digital clock on the SmartBoard to show students how much time they have left to complete the activity as well as verbally reminding students how much time they have left. Students will use hand signals to show whether they agree or disagree with another student's response. In the front of the room there is a picture schedule with symbols that tells the students what to expect throughout the day. The teacher also uses symbols to indicate when it is time for group work, partner work or individual work. The teacher will often explain a lesson using several different methods or through several different activities in order to help all students master the content.

Options to support Action and Expression: Students will be able to choose a responsible seat in the room, and it is up to them to decide if sitting there will benefit or hurt their learning. Students have access to their devices and will be able to utilize them during the lesson if desired or necessary. Students can submit their work online or on pencil or paper. Students can go up to the board to show their work and explain their answers to the class. All class materials (crayons, markers, scissors, glue, paper) are accessible to all students and are available for use at any time. At the end of each lesson, the students are verbally asked whether or not they met the objective of the lesson. Students will use hand signals to show their answer to the teacher.

Accommodations/ Modifications for specific students:

Alex, who has dyslexia, will receive a pencil grip that he will be able to use during this lesson. This will help him particularly during his independent work, where he will have to read and answer word problems. He will also be allowed to use the Text Aloud system during independent work, which will read the word problems aloud for him. This will ensure that Alex is being assessed based on his ability to tell time and not on his ability to read the word problem.

Betty will sit close to the front of the room to ensure that she can see and hear the teacher. At the beginning of the lesson, she will turn on her Infrared hearing device which will connect to her cochlear implant. This will help her hear the teacher's instructions. Betty will be able to use her foldable throughout the whole lesson in addition to a personal mini Judy clock, which will be available for all students as well. The teacher will always explain directions verbally as well as post them on the board, which Betty can use as a reference if she did not hear the directions. The digital timer on the board will help Betty keep track of time. Debbie's teacher will use a highlighter and post it notes to emphasize key details in the directions as well as on Debbie's classwork assignments.

*Identify again your Lesson Objective(s) to make sure you are Assessing them in your Lesson
*Could Elaborate More on How Results will be used to Inform Instruction and Give Feedback

Assessments

FORMATIVE ASSESSMENTS [Multiple Measurable Opportunities to Gauge Student Engagement]

Students will create a foldable clock in order to assist them in telling time to the nearest 5 minutes on an analog clock. Students will use this foldable during class instruction to help them tell time on the teacher's analog Judy Clock.

During classroom instruction, the teacher will project a time on her large Judy Clock. The students will have white boards and will use the foldable they created in order to write down the corresponding time digitally. The teacher will observe student responses and ensure that students are on the right track and are using their foldable correctly. [Plan for How Results will be Used to Inform Instruction and Give Feedback]

The teacher will call out various times and display them digitally on the board. Students will use their judy clocks and show the corresponding time on their analog clock. The students will hold up their judy clocks to show their answers.

Students will also have a chance to go up to the SmartBoard and draw arrows on a projected analog clock. Another student will go up to the board and explain what time it is and how they know they are correct.

Students will use their hand signals to show whether or not they agree with a statement or an answer by another student. This will allow the teacher to quickly assess students' performance. If students disagree on an answer, the teacher will open the floor up for discussion. [Plan for How Results will be Used to Inform Instruction and Give Feedback]

At the end of the lesson, students will complete 5 brief word problem questions that show their understanding of telling time to the nearest 5 minutes. The teacher will collect these problems at the end of class, grade them, and provide feedback for students the following day. [Plan for How Results will be Used to Inform Instruction and Give Feedback]

SUMMATIVE ASSESSMENTS [Flexible Summative Assessment]

At the end of the unit on telling time, students will complete a unit test that will assess their knowledge of telling time to the nearest 5 minutes using AM and PM. The unit test can be completed online, where students have the option of recording their voice to explain their answers, they can type their responses or draw clocks using the stylus to show their work. If students would rather complete the unit test on paper, the teacher will print the assignment out for them.

The test will feature several selected response questions as well as constructed response questions. For the constructed response questions, students will be given the option of illustrating or drawing to explain their answer or writing complete sentences. Students can also use the voice recording tool on their devices to explain their answers.

*Add End of Lesson Assessment.

*Add How Results will be used to Gauge Success of Lesson, and Inform Next Lesson and Overall Teaching

Instructional Methods

OPENING Introduction

[An Engaging Plan for Instruction with Clear Beginning, Middle, and Closing that is Aligned with Goal and Objective(s)]
 [Includes Supports Identified in Earlier Section to Take Advantage of Learner Variability with Principles of UDL]
 [Includes Flexible Materials, Supports Students Identified with a Disability and Students Identified as GT and ELL]

When the timer goes off and the music ends, students know that instruction is about to begin. **Betty, who has a hearing impairment, will turn on and use her infrared system throughout the whole lesson.**

The teacher will ask students to **choose a seat in the room before the lesson begins.** The teacher will first **ask** students: What does it mean to choose a responsible seat? What are some ways that you should behave when you are allowed to choose your own seat? What are some irresponsible behaviors we should try to avoid? Do you think the seat you have chosen will help you do your best work? If not, please choose another one. This brief discussion will help to avoid behavior problems during the lesson.

Betty will be encouraged to sit closer to the board along with Chris, the English language learner.

Ask one student to read the objective. Ask: What will we be learning about and practicing today?

Anticipatory Set

Ask students to show thumbs up or thumbs down if they learned about telling time in first grade. Ask: What is different about our objective today? Students should answer that today they will be learning how to tell time to the nearest 5 minutes instead of half hour. Explain that today students will be using what they already know about telling time and adding on a new skill.

Hook

Have a brief discussion with students about why we tell time. Ask: What kinds of things do you use time for? Encourage students to use background knowledge or personal experiences. Sample answers may include: Knowing when to wake up, knowing when to go to bed, knowing when school starts, knowing when dinner is, etc. Student answers can be recorded on the board. Encourage students to think about what would happen if we couldn't tell time?

Explain that all of the reasons the class generated are reasons that telling time is important. Today, students will learn and practice how to tell time, which is a very important skill.

DURING

Introduce New Knowledge

The teacher will display an analog clock on the Smart Board. Encourage students to think back to what they learned in first grade. Ask: which is the hour hand? Which is the minute hand? Have a student come up to the board and point to each arrow.

Display the time 2:30 on the clock. Ask: What time is it? Ask the student who answers to justify their answer. Ask the rest of the students to use their hand signals to show whether or not they agree with their classmate's response.

Display the times 12:00, 4:30, 6:00 and 9:30, repeating the same exercise. Ask students to justify their answers and have the rest of the class use their hand signals to show whether or not they agree. If students disagree, have another student explain their answer as well. Together, the class will determine which answer they believe to be correct.

Tell students that we can tell time to the nearest 5 minutes, not just the nearest half hour. Ask: What do you think the numbers on the clock represent? If we know that the "6" represents a half hour, what do the numbers 1-5 represent? Ask students to Think - Pair - Share with the person sitting next to them. Encourage brainstorming and accept all student responses.

Explain that the numbers on the clock mean that we are counting by 5s. Ask students to show thumbs up or thumbs down if they remember skip counting by 5s in 1st grade. As a whole class, skip count by 5s around the clock. The teacher will move the minute hand on the analog Judy clock to visually show students every 5 minutes on the clock. Ask: What happens when we hit the 12 on the clock? How many minutes are in an hour? What happens once we move past the 12 and hit the 1 again? Accept all student responses and remind students there are only 60 minutes in an hour. When the minute hand passes the 12, a new hour begins and we begin skip counting by 5s again.

Explain to students that they will be creating a foldable to help them tell time to the nearest 5 minutes. Now that we know what each number on the clock represents in minutes, we can create a foldable to help us remember and practice telling time.

Distribute the two worksheets necessary to complete the foldable. Explain to students how to put the foldable together verbally - one circle will have the numbers 1-12 on it (to represent the numbers on the clock) and one circle will have the numbers 5-60 on it (to represent the number of minutes in an hour). Ask students: what do these numbers represent? Why are they important in our foldable? Allow students to make predictions and instruct them to keep this in mind while they create their foldable.

Instruct students to cut along the dotted lines of the foldable. Display the directions on the Smart Board to allow students to reference them if they are stuck. This will help Betty, who has a hearing impairment, reference any directions she may have missed verbally. The teacher will also have a pre-made model of the foldable and will leave it in the front of the room for students to reference. The teacher will show Chris, the English language learner, the model of the foldable and allow him to examine it closely. Since Chris learns best by modeling, the teacher will allow him to use her model as a reference for completing his own foldable.

A digital timer will be displayed on half of the board. The teacher will explain the students have 10 minutes to complete their foldable. When the timer goes off, whole group instruction will begin again. The digital timer will help all students in the class, especially Betty and Chris.

Model New Skills and Knowledge

Once the timer goes off, all students will put their materials away.

The teacher will distribute both mini Judy clocks as well as white boards. Debbie, a GT student who struggles with motivation, will benefit

from these manipulatives in order to sustain motivation. Chris, the ELL student, will also benefit from the use of manipulatives due to his difficulty with spoken and written language. The Judy clock will provide him with a way to show his answers to the class without having to use many words.

Ask: What are some ways to be responsible with these materials? The students will raise their hands and generate a list of responsible and irresponsible ways to handle the materials. The teacher will explain to students that it is their responsibility to take care of these materials and use them appropriately during the lesson.

Ask: What do we notice about the numbers on our foldable? What do you find interesting? How do you think our foldable might be able to help us tell time to the nearest 5 minutes? All student responses will be accepted. Students will use hand signals to show if they agree with a statement another student has made.

Once this discussion is over, the teacher will clarify (if it has not already been clarified) that the numbers on the top layer of the foldable 1-12 represent the numbers on the clock, and the numbers on the bottom layer 5-60 represent how many minutes have passed to the nearest 5 minutes. Model opening up the flaps on the foldable to reveal how many minutes have passed. Explain to students that they will now practice using their foldable in order to tell time.

The students will first begin by using their mini Judy clocks while the teacher uses her large Judy clock. Ask: Is this a digital clock or an analog clock? How do you know?

The teacher will display a time on her analog clock. She will instruct students to create this time on their mini Judy clock as well. This will help the students reference the time, especially Chris and Betty. Then, once students have used their foldable to determine the time, they will write the answer on their white boards using digital time. The teacher will instruct students to turn their white boards upside down until the entire class is ready to share.

Throughout this guided practice, the teacher will use mental modeling to show students what steps they should take when telling time. She will display a time on her analog clock and show students how she can use the foldable to help guide her thinking. The teacher will verbally say "I know each number on the clock represents 5 minutes, and I know the short hand is the hour hand and the long hand is the minute hand. The hour hand is on the 1 which means it is 1 o'clock. The minute hand is on the 5, which means it is (5,10,15,20...) 25 minutes after 1 o'clock. It is 1:25". This will help all students but it will especially help Chris, the English language learner. He will be able to see and hear the process of the teacher to help him during independent work.

The teacher will use call sticks to have students come up to the front of the room and share their answers. Students will have the options to use the teacher's large Judy clock or use the projected analog clock on the Smart Board to show their answers. The teacher will ask: What time do you think it is? How do you know? Once the student has shown their work and has explained their answer, the teacher will instruct all remaining students to hold up their white boards and show their answers. If there are discrepancies, the teacher will allow the second student to explain his or her thinking, and the class will discuss and decide which they believe to be the correct answer using their hand signals.

The teacher will repeat this process for 5-10 minutes, displaying different times on her analog clock and having students tell what time it is.

The teacher will also have students practice showing time on an analog clock. The teacher will verbally call out a time and write the time digitally on the board. The students will then use their mini Judy clocks to display the time. The teacher will use the call sticks to call a student to show and explain their answer. Once the student is done, the remaining students will show their answers on their Judy clocks. This process can be repeated several times.

The final guided practice activity will involve a projected analog clock on the Smart Board. The teacher will use the call sticks to have one student come up to the board and draw the minute and hour hands wherever they would like on the clock. Then, the teacher will call upon a second student to come up to the board and tell what time it is. They will have to explain how they know they are correct. The remaining students will use their hand signals to show whether or not they agree.

Debbie will benefit from coming up to the board and being involved in these types of whole group discussions/ dissections of each problem. By allowing her to come up to the board, she will remain engaged in the lesson. Alex will also benefit from this type of instruction because he enjoys sharing his ideas with his peers.

Independent Practice

The teacher will explain that students will work to complete several problems on their own to show their understanding of telling time to the nearest 5 minutes.

Students will complete the 5 brief word problems independently. Students can use their foldable and their mini Judy clocks to help them complete this final assignment. **Debbie, the student who is gifted and talented, will be encouraged to not use her foldable during the assessment in order to provide extra challenge on the assignment.** However, if she feels that the problems are too difficult she can go back to using her foldable at any time.

The teacher will display the timer once more on the board. She will tell the students they have 10 minutes to complete the assignment. When the timer goes off, students are to turn in their work and return to their seat.

Betty, who has a hearing impairment and may miss directions, will receive a highlighted version of the assignment. The teacher will highlight the key aspects of the problem for Betty and will use post-it notes as a visual cue that will remind Betty of any key details she might have missed verbally.

Alex will use Text Aloud during this assignment. The problems will be read to him aloud in order to ensure that he is assessed based on his math skills and not his reading skills. **Alex will use a pencil grip when writing his answers in order to help his handwriting skills. He will also have the choice to type his answers on his device.**

The teacher will have a must do - may do chart projected on the board. This is for students who are early finishers, like Debbie, the gifted and talented student. The chart will provide options and emphasize student choice on how they can spend their time. If Debbie and other students finish early, they may work with a partner and take turns creating times on their mini Judy clocks. The other person will then tell the time

to the nearest 5 minutes. Students may also use their devices to play with the interactive analog clock (retrieved from <http://www.visnos.com/demos/clock>) independently. They can generate various times on the analog clock and practice telling time.

CLOSING

Once the timer goes off and all students are back in their seats, the teacher will ask a student to re-read the objective.

Ask: What was our objective for the day? Did we meet our objective? (Students will use hand signals to answer this question) How did we meet our objective? What is one new thing you learned today? What was your favorite part of today's math class?

Author's Reflection [Connection to CEC and InTASC Standards]

Through the creation of this lesson plan, I have taken into consideration the UDL framework, the CEC standards and InTASC standards.

In order to engage learners, the lesson begins off with relating telling time not only to students' background knowledge but also relating to their everyday lives. The teacher's discussion of why telling time is important will help motivate and engage learners. Through this discussion they will gain a sense of understanding of the importance of time and why it is a skill that second graders must master. Students will be engaged throughout the lesson through the use of a wide variety of materials and activities. By giving each student a personal mini Judy clock, the students are provided with options for recruiting interest as well as sustaining effort and persistence. This is especially helpful for the gifted and talented student Debbie, who is at a third grade math level but often gets bored during class. It also provides another method of representation. The use of the foldable as a reference will help all students but will be especially helpful for Alex, Chris and Betty. All students can use the foldable to help them throughout the lesson, which provides appropriate scaffolding for second graders who are just now learning a new skill. Chris, the English language learner, will benefit from the foldable because he can use it as a model to help him throughout the lesson. He can also use his personal Judy clock to show his answer. Allowing the students time to discuss during Think Pair Share as well as whole group discussions, the teacher is fostering collaboration and community. Students will use their hand signals to talk with one another, which helps students learn from one another and promotes an active dialogue between the students if disagreements occur. By allowing students to choose a seat that they think they will perform best in, the teacher is giving students options for self-regulation as well as optimizing student choice. By making all classroom materials accessible for the students and using a wide variety of materials throughout the lesson, the teacher is providing multiple means of representation as well as multiple means of action and expression. The use of Judy clocks, white boards, the Smart Board and the foldable will allow and help all students to succeed. By practicing the skill of telling time to the nearest 5 minutes in a variety of ways, the teacher is using multiple means of representation as well as giving students different ways to present their answers, which correlates to multiple means of action and expression.

Through my knowledge of CEC 3 (curricular content knowledge), I was able to create a lesson plan that can fit both a general and special education curriculum. CEC 3 states that teachers use knowledge of special education and general curricula to individualize learning for individuals with exceptionalities. This is evident through the accommodations and modifications I have made throughout the lesson for my two students with IEPs as well as the English language learner and GT student. Even though all 4 of these students have individual strengths and needs, this lesson plan, created under the UDL guidelines and framework, is able to ensure that all 4 of these students will be able to tell time to the nearest 5 minutes. The key element of this standard is to make the material of the lesson accessible to all students. Through the incorporation of materials such as Judy clocks and foldables, the students are moving away from traditional worksheets and are engaged in an active dialogue with their classroom teacher and each other. Students practice telling time in a variety of ways and using a variety of methods in order to not only help the teacher monitor progress but to present the content of the lesson in a variety of ways.

InTASC 7 (planning for instruction), 8 (instructional strategies) and CEC 5 (instructional planning and strategies) were also incorporated into my lesson plan. By incorporating the UDL principles and guidelines, I was able to create and plan a lesson that would meet the needs of all of the students in the classroom. The purpose of UDL is to design a lesson that will work for all students, rather than creating a lesson that will have to be modified individually for each student with a disability or a special need. For example, creating and using a variety of guided practice activities during the lesson will allow students to see and experience telling time in different ways. Sometimes students would show their work on an analog clock, or sometimes they would write the time digitally after the teacher showed a time on an analog clock. This repeated practice and alternation of activities reinforce the objective of the lesson but also differentiates to help meet the needs of all of the students in the class. Some students might benefit from one approach, while others benefit strictly from another. The lesson also includes a wide variety of materials which will help students of all abilities access the tools that they need in order to be successful in the lesson. Through considering multiple methods of representation, engagement and action and expression, the teacher is putting into place tools and strategies that students can use in order to be successful in the lesson.

By applying the UDL guidelines to the lesson plan, the teacher is able to meet the needs of a diverse group of learners. Every student will be able to benefit from the use of manipulatives, options for student choice, multiple means of engagement as well as multiple methods in displaying their knowledge. This makes the lesson accessible for all students, regardless of their disabilities or needs.

Materials

MATERIALS AND SUPPLIES

- White boards and dry erase markers (one per student)
- Mini Judy Clocks (one per student)

- Teacher's Judy Clock
- SmartBoard
- Digital timer access
- Student devices (one per student)
- Pencil and paper (one per student)
- Classroom materials (scissors, glue) available to all students
- Pencil grip (1 for Alex)
- Call sticks
- Highlighter (for Betty's assignments)
- Post it notes (for Betty's assignments)
- Text to Audio program (for Alex)
- Infrared System
- Interactive online analog clock (<http://www.visnos.com/demos/clock>)

RESOURCES INCLUDED

Infrared System

Why it's included:

The infrared system will be used with Betty, who has a hearing impairment. Betty can turn on the infrared system and use it throughout the lesson in order to be able to hear the teacher and the instructions begin given.

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Text Aloud

Why it's included:

Alex, who has dyslexia, has difficulty reading and understanding directions. This program will read the text aloud to the student to ensure that the student understands the problems as well as the directions. It will also ensure that the teacher is assessing the student's math skills and not their reading skills.

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Highlighter

Why it's included:

The highlighter will be used by the teacher to highlight important details or directions on Betty's assignments. Since there is a chance that Betty may have missed key verbal directions, the teacher will re-emphasize these elements on Betty's paper. This will serve as a visual cue and reference for Betty.

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Pencil Grip

Why it's included:

The pencil grip will be used by Alex during his independent work. Since Alex has dyslexia and has poor handwriting, the pencil grip will help Alex hold his pencil properly and work to improve his handwriting.

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Author's Reflection

Throughout the lesson, I have incorporated a wide variety of materials that will provide multiple means of representation as well as multiple means of action and expression. Allowing students to create a foldable using readily accessible classroom materials will help give a visual representation of what each number on the clock stands for (to the nearest 5 minutes). This is appropriate scaffolding for students who are just learning this concept and will especially help Chris, the English language learner who learns best through modeling. Allowing students chances to come up to the interactive board to show their answers as well as using white boards and mini Judy clocks will give students practice with the skill of telling time in a variety of ways. It also provides a way to keep students engaged in the lesson, especially Debbie who is a gifted and talented student who struggles with motivation. Through several different activities and exercises, students are using a wide variety of materials to show their work and explain their answers. Providing all of these materials and giving students the choice of which they would like to use will help each student figure out what works best for them and allow them to display their knowledge and understanding in a way of their choosing.

When deciding which high and low tech assistive technologies to use with my students, I took into account the SETT framework. The first step is to think about the strengths and weaknesses of the students in the class who require AT. I looked at their current abilities as well as special needs regarding an area of concern. Once these were established, I took into account the environment and classroom setting. For example, the low tech ATs that I chose to use were readily available in the classroom environment. This is appropriate because the tools that my students need in order to be successful are easily accessible and are also open to the rest of the students in the classroom. This also reinforces the idea of Universal Design for Learning. The next step was to focus on the task at hand – that is, what the students will be required to do during the lesson. For example, Alex, who has dyslexia, will have to read and answer several word problems. Due to his high incidence disability, Alex will struggle with reading the text and this may inhibit his performance. There is also a chance that due to his lack of comprehension, Alex will be assessed on his reading skills and not his math skills. It is through identifying this task that I was then able to think about which specific assistive technologies I should use for my two students.

Alex, the student with dyslexia, required additional supports due to his difficulty with comprehension and reading of written text. Often times Alex will not finish his work because he cannot read the problem, even in math class. By making Text Aloud accessible to him, Alex will be assessed on his math skills and not his reading skills. This will remove the barrier of his inability to read the word problems during his independent work and will accurately show the teacher how much Alex knows about telling time. This optimizes access to tools and assistive technologies while also varying the methods for response to meet the needs of this individual learner. Betty, the student with a hearing impairment, has difficulty understanding verbal directions. The teacher will seat Betty in the front of the room in addition to using her infrared system as a way to hear the teacher better during instruction. Betty works best with hands on manipulatives and activities, so throughout the lesson she will be able to use her foldable as well as her mini Judy clock. By providing both verbal and written directions throughout the lesson, Betty is receiving information through multiple representations. The teacher is customizing the display of information to help better meet the needs of the class as a whole as well as meeting the needs of Betty and providing accommodations/modifications based on her IEP. By providing Betty with highlighted notes and classwork assignments, the teacher is able to emphasize the key details in the assignment that Betty might have missed during instruction. The teacher can use post it notes to visually remind Betty of the instructions (such as flipping to the next page or reminding her the question has two parts).

All of these materials connect to the **CEC 1 and InTASC 2 Standards – learner development and individual learning differences**. These materials allow all students in the class to learn and give them a variety of options and tools to meet the lesson's objective. CEC 1 states that special education teachers understand how exceptionalities may interact with learning and use this to provide meaningful and challenging experiences for these individuals. The teacher recognizes barriers for several or all students in the class and works to eliminate them through carefully planned materials as well as instructional methods. The role of the educator is to determine the strengths and needs of each individual and determine what tools and materials will help the student meet the goals and objective of the lesson. By planning for these learning differences and building them into the lesson, rather than simply adding on or modifying instruction for students with disabilities or special needs, the lesson works for all students. When a teacher takes into account learning differences prior to creating the lesson, he or she is creating a UDL lesson plan. Through the incorporation of a wide variety of materials throughout the lesson, all students' needs are being met, both as individuals as well as a whole group.

Comments