LESSON 2: VISUALIZING ANALOG TIME

Background

Digital Versus Analog Clocks

Versus

Digital clocks became widely popular in the 1980s. They looked sleek and modern, and they were easy to read because they did not require visual interpretation like the relative hour-hand versus minute-hand positions of analog clocks. However, this posed a huge problem for time management. People stopped learning to *visualize* time in certain ways that are important for successful planning.

When we look at a digital clock, it is only telling us about the time in that moment. If we want to plan for an event that will happen at a future time using a digital clock, we have to do a mental math equation, which is a cumbersome way to think about time. For example, a student who looks at a digital clock that says it's 5:17 and realizes they will have to leave the house at 5:45 for a sports practice thinks, "If it's 5:17 now and I have to go at 5:45, then 45 [5:45] minus 17 [5:17] equals 28 minutes. I have 28 minutes to get ready." By contrast, if that student looks at an analog clock at 5:17, they can clearly see the sweep of time available from the minute hand's current position to the point on the clock when they will need to leave. They can quickly envision a future time and see the amount or volume of time they have between *now* and *then.*

The Time Tracker Program encourages you to use analog clocks to plan and monitor how you are using your time. Analog clocks will help you to do the following:

- see the time you have available to complete a specific task or assignment,
- set your work pace, and
- see the passage of time to increase both your awareness of the impact of distractions and your ability to shift and get back on track.

In the following exercise, you will practice planning student scenarios using an analog clock.

Directions

DONE (the goal)

You will begin to "see" the passage of time on an analog clock for common everyday situations. This is important for building time awareness, focus, and planning skills.

DO (the steps you will take)

- Read the student scenarios. For each scenario, do the following:
- If you are using an actual analog clock, rotate the clock hands to the start time in the scenario. If you are using a photocopy or image of a blank clock (including on an online interactive whiteboard), then draw the clock hands at the start time.
- If you are using an actual analog clock, place a dry-erase marker on the center of the clock, draw a line along the minute hand toward the outer frame of the clock, and then—in a clockwise direction—move the marker along the clock's outer edge, counting by 5s from the start time to the end time of the scenario. This will help you to feel the clockwise sweep of time. If you are using a photocopy or image of a clock, follow the same process, drawing a line along the minute hand to the clock's outer edge, then along the edge to the scenario's end time.

- Shade in the volume of time from the start to the end time, representing how the time will fill up.

Example:

Leah started reading at 9:50. She stopped at 10:15. Shade on the clock the amount of time she spent reading.	

GET READY (the materials you will need)

- A copy of the Scenarios for Visualizing Analog Time
- An analog clock, called the *Working Clock* because it shows your work time. You may also use a photocopy of a clock (see Appendix A) or a clock image on an interactive online whiteboard.
- A dry-erase or water-based marker (for a Working Clock) or a pencil or pen (for a photocopy) to draw and shade in the time on the clock.

Activity: Scenarios for Visualizing Analog Time

Amelia is taking the bus on a class field trip to a local park. The bus leaves school at 9:00 a.m. and will arrive at the park at 9:15 a.m. Shade on the clock how long the bus ride will take.	
Aakash arrives at the locker room at 5:15 p.m. to get changed and warm up for a football game that starts at 6:00 p.m. Shade on the clock the time he will spend preparing for the game.	
Rowan goes for a run to get some exercise. She leaves the house at 3:30 p.m. and runs for 30 minutes. Shade on the clock how much time she spends running.	

Carlo and Siena went to the aquarium. They arrived at 2:10 p.m. They left the aquarium at 3:00 p.m. Shade on the clock how long they spent at the aquarium.	
Elijah is watching a favorite TV show. It starts at 7:00 p.m. and is 30 minutes long. Shade on the clock how much time he spends watching the show.	
Sandra is performing a routine in a dance recital. The routine lasts 15 minutes and starts at 7:30 p.m. Shade on the clock how long the dance routine lasts.	

Brayden is walking the dog. They leave the apartment at 8:45 a.m. and are gone for 30 minutes. Shade on the clock how long Brayden spends walking the dog.	
At 3:40 p.m., Nicola starts preparing to go to a music lesson. She spends 5 minutes putting away her homework and 15 minutes packing up her instrument and music notebook. Shade on the clock how much time she spends preparing.	
Latisha left home for school at 7:40 a.m. and arrived at 8:05 a.m. Shade on the clock how long it took Latisha to get to school.	

Avery started working on a composition for a music class at 12:50 p.m. on Saturday and finished at 1:25 p.m. Shade on the clock how much time she spent composing.	
Matt starts to get ready for his day at 7:15 a.m. He takes a 5-minute shower. He spends the next 5 minutes getting dressed and brushing his teeth. It takes him 5 more minutes to collect his homework and put it in his backpack and walk downstairs to the kitchen for breakfast. Shade on the clock how much time Matt spends getting ready from 7:15 a.m. until he arrives in the kitchen.	
Roberto began folding clothes at 8:15 p.m. and finished at 8:25 p.m. It then took 5 minutes to put the clothes away. Shade on the clock how much time Roberto spent managing the clean laundry.	

At 8:25 a.m., Madison and a classmate start preparing to open a fundraising lemonade stand. They spend 20 minutes making the lemonade and gathering materials and 15 minutes making a poster. Shade on the clock how much time they spend preparing.	
Makaal raked the leaves in his front yard. He started at 2:15 p.m. and raked until 2:50 p.m. Shade on the clock how much time he spent raking.	
Simon cleaned up his room. He started at 4:30 p.m. He made the bed, tidied his desk, and gathered up his dirty clothes and took them to the laundry room. He was done by 4:45 p.m. Shade on the clock how much time he spent cleaning.	

Brett started doing her homework at 6:20 p.m. She finished at 7:00 p.m. Shade on the clock how much time she spent doing homework.	
Alex starts working on his school project at 3:00 p.m. and he needs to leave the house at 4:00 p.m. to get to track practice on time. He will need 10 minutes to change and get his track gear together before leaving. Shade on the clock how much time he will spend working on his school project.	
Caleb starts playing video games at 1:00 p.m. and he needs to leave the house at 2:00 p.m. to go to the movies. Before leaving, he needs to spend 20 minutes on his math homework and 10 minutes putting away his homework and getting ready. Shade on the clock how much time he can spend playing video games if he wants to have enough time to complete his homework before going to the movies.	

Teagan usually wakes up at 6:30 a.m. but she overslept this morning by 20 minutes. Now she needs to rush to get ready for school and be out the door by 7:15 a.m. Shade on the clock the time that is now available for her to get ready.	
Philippe needs to finish creating his slide show for a research project by 7:30 p.m., when he will leave home to go to a theater rehearsal. He starts working on the project at 6:40 p.m. Shade on the clock the amount of time he spends working on the project.