

## **Technology Inventory**

During the course of my teaching field experiences I have used a number of learning management systems available at the district including *Clever*, *Microsoft Teams*, *Amplify ELA*, *ClassDojo*, and *PowerSchool*. The District provides access to a large number of different learning apps. However, with this department and with the classroom in general, the *My Teaching Strategies* app is used for submitting assignments virtually on Wednesdays, which is the District's virtual school day. The *Remind* app is used primarily for sending messages to parents. It's a form of two-way communication like an instant messenger of sorts outside of a phone call or sending letters home but it can also be used to send a mass message out to all parents. *Remind* is a secondary form of communication with parents in this classroom.

The District uses *Creative Curriculum's Teaching Strategies Curriculum* for the curriculum and assessment of students. Assessments are typically conducted manually in class with anecdotal notes as well as formative assessments and compiled to track improvement in Creative Curriculums or pulled from notes, photos, and videos submitted to the *My Teaching Strategies* app throughout the week. This classroom has a teacher's laptop, a SMARTboard, six classroom laptops ready at our disposal, and access to Wi-Fi.

## **Rationale**

My lesson utilizes the classroom SMARTboard as a main technology resource. Using this board rather than setting up the classroom laptops for the students to complete this lesson was a conscious choice. The large SMARTboard allows me to work with more than one student at a time and it gives everyone a turn at pressing the buttons, following directions, developing fine-motor skills, and of course building upon knowledge of letters in the alphabet. The SMARTboard is a type of interactive whiteboard (IWB) that when connected with a computer, it can project the screen onto it. We can touch the boards surface like a tablet device to change screens, play games, watch videos, write, or draw. We can use special digital pens and even an

eraser to write on the board. In addition to the board, I used a Chit Chat PDF to write on and be able to save the students' work as documentation. It is a fun change to be able to use the digital pens on the board, which feels and looks kind of like a wall. The digital pens are not the easiest instruments to write with, but they are interesting, new, and different than what the students are used to using.

To break up the lesson I link to a Starfall activity in the middle to engage the students—allowing them to take turns being the teacher by advancing the slides; pressing buttons; making choices; and even doing a three-question quiz to test their understanding. Before returning back to the Chit Chat PDF to practice our letters by filling in the blanks, we see if we can come up with any more letters. Overall, the lesson gives the student some exposure to technology and its quirks. While doing so, it helps the students learn their letter(s) and letter sounds, develop fine-motor skills, interact with peers and adults, and learn how to navigate and follow directions and prompts.

## Lesson Plan / Objectives

<b>Lesson Topic:</b> Letter practice	<b>Grade:</b> Pre-K
	<b>Duration:</b> 10-15 minutes
<b>ISTE:</b> <ul style="list-style-type: none"><li>• ISTE 1a – Empowered Learner: Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.</li><li>• ISTE 1c – Empowered Learner: Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.</li></ul>	
<b>Standards: COMMON CORE CODE and description</b> <ul style="list-style-type: none"><li>• NYS PKSL1: Participate in collaborative conversations with diverse peers and adults in small and large groups and during play.</li><li>• NYS RF.PK.1.d: Recognize and name some upper / lowercase letters of the alphabet, especially those in own name.</li></ul>	
<b>Objectives/Essential Questions</b> <ul style="list-style-type: none"><li>• Sw be able to identify and name the letter "T/t" and letter sound /t/</li><li>• Sw develop fine-motor strength and coordination — using fingers and drawing tools</li></ul>	
<b>Lesson Sequence</b> <p><b>Opening/Anticipatory Set</b></p> <ul style="list-style-type: none"><li>• Introduce the letter "t" to the students, call on students to identify pictures that begin with "t"</li></ul> <p><b>Materials / Preparation</b></p> <ul style="list-style-type: none"><li>• SMARTboard</li><li>• SMARTboard pens / eraser</li><li>• Chit Chat PDF with "t" words — fill in blanks with the letter "t"</li></ul> <p><b>Mini-lesson</b></p> <ol style="list-style-type: none"><li>1. Tw introduce the letter /t/ sound and a picture of a turtle. "t says /t/."</li><li>2. Tw model proper way to write upper and lowercase "t."</li><li>3. Sw skywrite the letter "t"</li><li>4. Sw take turns writing the lowercase/upercase letter on the SMARTboard.</li><li>5. Sw visit Starfall <a href="#">webpage</a> for the letter "t" for an interactive activity (words that start with "T/t," letters that don't belong).</li><li>6. Sw take turns advancing the interactive slides.</li><li>7. Tw ask "Can you come up with some additional words that start with the letter "t?"</li></ol> <p><b>Work Period</b></p> <ol style="list-style-type: none"><li>1. Sw point out the pictures above the blanks on the Chit Chat PDF and</li><li>2. Sw take turns writing the letter "T" and or "t" in the appropriate fields of the chit chat PDF using SMARTboard colored pens.</li><li>3. Sw sign their name next to the letter.</li></ol> <p><b>Closing</b></p> <p>Review the letter of the day, sounds, items that start with the /t/ sound. "How comfortable to we feel about the letter "t"? Thumbs up/down." Tw screenshot the small group work with name next to letters</p>	
<b>Modifications/Accommodations</b> <ul style="list-style-type: none"><li>• Differentiate lesson with drawings, circling letters if student exhibits low fine-motor skills.</li><li>• Circle other words with "t" in the paragraph if there is time left.</li></ul>	
<b>Assessment/Graphic Organizer/Rubric</b> <ul style="list-style-type: none"><li>• Was the child able to recognize?</li><li>• Was the child able to match in alphabet letter to the correct page in the book?</li><li>• How long was the child able to attend the experience?</li><li>• How accurately did the child respond to the questions?</li></ul>	

## Reflection

I believe the lesson was successful due to the amount of engagement, turn-taking, following directions, interactivity, questions, repetition, and differentiation (for students with low fine-motor strength or unfamiliarity with the letters of the alphabet). The technology certainly enhanced the student's learning experience due to some of the interactive digital elements (digital pens, Starfall) and engagement. The students always enjoy a chance to use the SMARTboard and step up to the board. The consensus was that every student was comfortable with the letter "t" after the lesson.

While I personally find the SMARTboard pens to be relatively easy to use, they do not respond very well if they are not held perfectly against the SMARTboard. I think this can be difficult for children who are just beginning to write and have not quite developed their fine-motor strength/skills yet. With some guidance and handholding, I was able to help the students get the feel of drawing with the pens. Occasionally, the pens would lose signal and need to be docked to pair to the board again. This wasted time and as I have learned, it takes even longer to get a young student's attention back to the lesson once they are no longer focused. Another challenge I had was with getting my small group of students to skywrite along with our pen writer the moment I turned my head to help out the student with the pen. When I was not looking, the students would stop. While this did not happen in every group, it was often enough to note.

To perfect this lesson—using the current technology and software available to us at the school—I would create a Nearpod interactive lesson and collect the data from the cooperating teacher's account that we create. Unfortunately, my classroom does not

have enough laptops for everyone so they will have to be shared and the students will have to be taught to type their name or at least their initials before beginning. I think this could save some time over having to wait to open up the links and minimize / maximize windows. All of the lesson elements could be integrated into one window rather than linked. The biggest benefit would be that the students would be able to proceed at their own pace. On the other hand, there would be a little less handholding and it's possible that some students may need more time to finish the lesson or depending on the student, they may get frustrated. The amount of engagement in interactivity in the current lesson seems adequate enough but creating a Nearpod lesson would allow for additional interactive elements and animations to be added.

### **Professional Development / Learning**

In the Niagara Falls school district, each classroom has a SMARTboard and either a small set of class laptops or one-to-one laptops for every student. I believe most or all of the intermediate elementary grade levels have laptops for each student. The lower primary grades typically have 5 or 6 laptops per classroom. Logistically, I'm not sure there is a perfect option available right now for the pre-K level. The Pre-K department uses a few different applications for hybrid and remote learning for learning management and communication. They are *ClassDojo*, *Teaching Strategies*, and *Remind*. The *Remind* and *Teaching Strategies* apps are utilized by the cooperating teacher (CT). Ideally, I would use Microsoft Teams but from what I understand, pre-K has not been approved for use at this time. Due to these minor limitations, I think I would tend to stick to ready-made interactive activities such as Starfall for my students. Although, I think Nearpod would be a really effective way to obtain assessment data on my students. It is difficult as it is, to run formal assessments. If I can create or find Nearpod files that are fun and engaging for students—with interactive elements and YouTube video links—the

students could be assigned Nearpods to complete for practice. The largest logistical issue I foresee would be the initial time to get students up and running. A code and student's name would have to be entered on each laptop during table time (or center time). It would not ideal to have to do that for 3–4 students, every 10–12 minutes. If the Nearpod lessons are short enough, room could be left at the end for students to draw a picture on the screen to fill the remaining minutes before the switch.

SMARTboards are a fun piece of technology for the students to use. The current models installed in the school are frankly not ideal due to the lack of sensitivity. Unfortunately, they are not quite as responsive as most modern touchscreen devices are, so they are not ideal for practicing letters with pre-K students. If I continue to do digital handwriting activities, I will probably make my own interactive PDF documents that allow for larger writing space. Some of the ready-made documents are too crowded for these young students to write on. However, they are suited just fine for interactive games and activities so I would definitely use them for that purpose. I would also continue to show videos and images on the SMARTboard.

I have always been an early adopter of new technology and I will continue to do so especially as an educator. I think it is extremely important for teachers to know how to use technology effectively, not only to make their lives easier and more efficient but to pass on the skills to their students. It is important for young students to have the exposure to the same technology the rest of the world is using at an early age so that our students can be competitive. It becomes increasingly more important as educators get older as we may need to pivot like many had to at the start of the global pandemic. I will always be on the lookout for new websites, games, quizzes, and software that I can utilize in my classroom instruction. In order to keep up-to-date and acquire more knowledge of instructional technology to promote active student engagement and higher order thinking I will:

- keep current and seek out the latest technology and software
- advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students
- Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.
- create rich, authentic digital materials for my fellow teachers to use
- be a leader and someone that people can teachers and students turn to for technology advice
- collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues