Emily Stone

Technology Literacy Plan

I. Students

In September I will have a 5th grade class of virtual learners. My class size should be about 20-25 students and all of these children spend their school day at home under the guidance of a learning coach (usually a parent). They will use our school’s online Learning Management System to locate their assignments, and the provided textbooks, trade books, e-texts and online resources (BrainPop, Discovery Learning video streaming, and others) to complete the curriculum. They will also come to at least one math and one language arts “livelesson” with me each week. In this livelesson students will be able to hear me, and one another, according to microphone permissions that I set. They will be able to see what is on my computer screen (Powerpoint, website, worksheet), type in a chat box, and draw/write on the screen as I permit. Each livelesson will be interactive (answer poll questions, answer a teacher’s question, write on the whiteboard, ask a question) and end with a follow-up assignment.

The students placed into my class will have received a “basic” or “below basic” score on the PSSA (Pennsylvania state test) in math, reading or both in 2008. If this data is unavailable, their placement will be based on a computer-based math and language arts assessment given in the summer. I will conduct oral reading fluency and comprehension assessments over the phone as soon as possible once the school year starts to further determine current reading levels. It is likely that some students will be repeating 5th grade. Some will be coming from public or private “bricks-and-mortar” schools, others
will have attended a virtual school (ours or another) the previous year, and others may have been homeschooled up to this point. After looking at students’ test scores, especially the oral reading fluency and comprehension that I conduct, and speaking with parents, I will identify a subgroup (hopefully no more than five) of students who are having moderate to severe reading difficulties. I do not know the exact students that will make up this group, but having worked with 5th graders this year who scored basic or below basic on the PSSA, I have an idea of what to anticipate. All of the students in this subgroup will have oral reading scores that put them in the “at risk” category for their grade. Their oral reading will be slow, they may lack strategies for pronouncing new words and their comprehension will be lower because their cognitive skills are being used to decode the words on the page. My previous experience has shown that a student for whom reading is a slow, laborious process can get frustrated while reading and it is difficult for that student to complete assignments (reading, writing, social studies, and science) that require reading. This student will often start falling behind in several subjects and feel overwhelmed. Spelling for this student tends to be difficult and he or she may have developed and used made-up phonetic spellings for so long that it will be hard to change to conventional spelling. As reading skills improve, students should be switching to conventional spelling, especially for commonly used words. Spelling should not hinder composition, but for a final draft, misspellings should be corrected. Some students are eager to orally participate in discussions, but have trouble expressing their ideas in writing. When text is read aloud by someone else, some students’ comprehension is great, but others need text broken down into smaller chunks, so it can be summarized, and discussed along the way.
Some of these students will have IEPS and a special education teacher who modifies their assignments, others may have a 504, be part of an ELL program, or will be general education students. By 5th grade, if reading difficulties have been with them for several years, this subgroup of students may be particularly unmotivated to want to attend reading class and complete reading and writing assignments. They may not have reason to hope that “this time will be different,” if they have mostly experienced failure or embarrassment before. This could even be the reason their family decided to switch to the virtual school model, to remove the embarrassment of failing or not being able to keep up with peers. It will be one of my tasks during our first few phone calls, emails, and livelessons, to ascertain each student’s strengths and interests. It is very possible that a student who falls into this literacy needs subgroup will have strong math abilities or strengths in other academic or non-academic areas. I will look for students’ social strengths (good listener, makes friends easily, enjoys telling stories) and try to capitalize on these traits during lessons and in assignments. In general, students in a virtual school are very interested in connecting with their classmates and discussing topics they have in common. Even in the virtual environment, students’ personalities can definitely shine through.

II. Curriculum

As fifth graders, my students will be expected to read, comprehend, discuss and write about grade-appropriate fiction and non-fiction text. They will need to connect new ideas that they read to their existing knowledge, making text-to-self connections, as well as text-to-text and text-to-world connections. They will be expected to identify and discuss
different features of text—characters, plot, setting, main ideas, supporting details—and include these elements in their own writing. When writing, students will be expected to organize their ideas into a clear, appropriate format, with purpose and audience in mind.

For my literacy subgroup, there will be additional goals. These students will need to improve their oral and silent reading fluency and comprehension. They will need to move their oral reading fluency from the “at risk” to “low risk,” and bring their comprehension scores to “proficient.” These students will need to increase their confidence, motivation and enjoyment of reading and writing, and make these activities a regular part of their lives. These skills are in addition to the general fifth grade literacy expectations mentioned above. For these students, goals of quality, not quantity are more appropriate. Shorter reading and writing assignments that still incorporate needed skills will be acceptable for these students, but like all students, there is no limit to what they can accomplish. A major challenge for this group of students will be making the time commitment necessary for improving fluency, comprehension and writing. They will be playing catch-up, attempting to make literacy gains in one year that others accomplished over two or more years. Existing attitudes of dislike for reading, low self-esteem or lack of motivation are other possible challenges. Some students may not receive the support at home that is necessary, so they may need to increase their independence as learners.
III. Technology

Technology use in the classroom should be a very purposeful endeavor. Technology has many uses—entertainment, socialization, communication, information, organization, etc.—so a teacher needs to be specific about the purpose of technology use in the classroom. Integrating technology into learning and teaching serves several purposes. It can offer students experiences they otherwise would not have, like communicating with a “keypal” in another state or country, or streaming live coverage of an international event. Technology can also make learning more efficient. For example, some education software will adjust the level of difficulty depending on student performance, meaning students can “skip” what they already know and are not wasting time on concepts and skills for which they are not ready. Writing and editing with a word processor can save time as it replaces re-writing several drafts by hand. Technology can also lead to more independent learning. With spelling & grammar checking, text-to-speech capabilities, interactive concept maps & graphic organizers, online dictionaries, encyclopedias and other resources, students have many tools at their fingertips that replace the need to ask the teacher for help. These tools tie back to the efficiency theme, because students spend less time waiting for help.

For students with disabilities, the benefits of using these technologies can be even greater. In addition to the resources already mentioned, assistive technology like voice-to-text software, modified keyboards, and digital text, allow some students to accomplish tasks they otherwise could not accomplish without a human assistant. Technology can also make content more engaging with interesting visuals, auditory components, and
animations. These engaging experiences, along with the immediate and constant feedback that technology can provide are especially helpful for students with low motivation.

In the virtual setting technology is already a large part of students’ experience. For students with literacy difficulties, the teacher should use technology to increase independence, reduce frustration, and increase motivation. This means offering alternatives to print text, reducing time-consuming tasks, like recopying writing drafts, providing social and engaging venues for sharing one’s writing and providing opportunities to be successful in front of peers. As always, the overall goal is to help students meet their personal goals, as well as school and state objectives. With all of the available resources, it seems we can modify “all students can learn,” to “all students can learn when technology is thoughtfully integrated.” The foundations of learning have not changed—quality teachers, curriculum and relationships. Thanks to technology and building on this foundation, we can offer students more individualized learning, authentic experiences, and limitless possibilities for their education.

Working at a virtual school brings the advantage of greater access to technology for both students and teachers. Each of my students has access to a desktop computer, the Internet and a printer. The computers have Microsoft Office programs, microphones, speakers, and sometimes webcams. The daily lessons, including links to BrainPop, Discovery Learning videos, and other online or computer-based resources are all located online by signing into a personal learning management system. The students have access to “Study
Island,” an online program that tracks their performance on reading and math questions designed to prepare them for the state test. They can post to teacher or club/activity message boards and attend Adobe “livelessons” where they can hear and interact with a teacher-presented lesson. They can also email their teachers and classmates in a closed email program. By virtue of having Internet access, students can also access educational websites (like those published by BBC, edhelper.com, mathplayground, etc.) to which I direct them. Families may have a computer for each student or siblings may share, but in general students have daily access to a computer and the Internet. Parents and students also use the phone to communicate with teachers.

Teachers have access to several supplemental programs. We can assign extra assignments in “SkillsTutor,” an online basic skills program. We have access to Reading A-Z, Writing A-Z and Vocab A-Z for alternative or enrichment lessons and assignments for students. The school belongs to firstinmath.com, an online math game where students and schools compete to increase computation skills. I have a “Starboard” or computer monitor where the user writes directly on the screen, and I have the ability to share my computer screen with students on their home computer. I also have the software and tools for conducting online tutoring. A new feature this year is e-texts for math, language arts, science and social studies. Most, if not all, offer built-in text-to-speech capabilities and an integrated glossary (click on a vocab word to see its meaning).

By fifth grade most of my students are familiar with going to websites and typing. Some have experience with PowerPoint and Word. Many of them use sites like “Webkinz”
where they virtually interact with other members. They are usually familiar with online
lingo like “lol,” and : ), as well as some that I do not know myself. Our curriculum
includes an educational technology course where students practice using Microsoft Office
applications and learn about Internet safety. As part of the school orientation, students
learn to use the email, planner, course tree, links, and gradebook included in the online
learning management system. All of the technology the students have access to for
school is available to them 24 hours/day, so there is not much difference in what they
have access to “outside” the classroom.

IV. Literacy Toolbox, V. Implementation, VI. Evaluation

My personal literacy toolbox is overflowing. For every literacy need, there are multiple
technologies available that can bring wonderful results. However, the actual tools I can
implement will always depend on the setting and available resources. For my plan to
support 5th grade virtual learners with literacy difficulties, I have chosen five technology
tools that are free or use existing resources, and will be easy for parents to install and use
on their home PCs. I will keep all other available resources safe in my toolbox for when
I am in a different setting or different resources become available.
### Students who need to:

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<th>increase oral reading fluency</th>
<th>increase comprehension of expository text</th>
<th>increase comprehension of fiction</th>
<th>increase organization and clarity of written products</th>
<th>increase motivation to read</th>
<th>increase motivation to write</th>
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**Will use:**

- **ReadPlease 2003**
  - X
  - X
  - X
  - X

- **Livelesson Reading Group**
  - X
  - X
  - X
  - X

- **Cmap**
  - X
  - X
  - X

- **Track Changes**
  - X

- **Message Board Writing**
  - X
  - X
  - X

### ReadPlease 2003

http://www.readplease.com

ReadPlease 2003 is a downloadable application that will read any text that is copied/pasted into its window. This text could come from a Word document, a website or the students’ online lesson descriptions. The free version does not expire and its installation is simple. The user may pause the reading or go back and reread a portion of the text, even a single word. The words are highlighted as they are read out loud, to provide a visual/audio matchup. This technology will be used for all students with a low
oral reading fluency, students having comprehension difficulties and students with a limited vocabulary.

**Implementation**

To implement ReadPlease 2003, I will email the link to parents, with instructions about how to download it to their school-supplied PC or laptop. I will create an Adobe Presenter stand-alone presentation to demonstrate how to use ReadPlease—how to open it, copy/paste text into its window, play, pause, repeat, delete and add new text. If any parent or student has trouble using the program, they can call me for further help.

Students will use ReadPlease to have all on-screen assignment directions, prompts and questions, as well as quiz and test questions read aloud. This will reduce time spent reading, increase comprehension (that can be lowered when the focus is on decoding), reduce frustration and leave more time for completing assignments. This should lead to more independent learning, higher quiz and test scores and increased enjoyment of school. Students will also use ReadPlease as a proofreading tool for any written response that is typed. Once a student has typed a response or essay, he/she will copy/paste it into ReadPlease to hear the writing and listen for any place where it does not make sense. The student can then self-correct errors that he hears to make the writing clearer.

**Evaluation**

During my bi-weekly phone call with the learning coach, I will ask about any change in the student’s willingness to complete assignments. I will also ask if she is able to complete the required coursework in less time. I will ask similar questions to the student to see how she feels about using ReadPlease, completing assignments and taking
assessments. I will ask if there are any difficulties with using the program. Before each bi-weekly call, I will examine quiz and test scores in language arts, science and social studies (subjects with heaviest reading load) to see if they increase when ReadPlease is used, and discuss the results with the parent and the student.

Adobe Connect Livelesson Virtual Reading Group

http://www.adobe.com/products/acrobatconnectpro/

My Room: http://livelesson.connectionsacademy.com/estone

For students with low oral reading fluency, low confidence and/or low comprehension, I will hold a weekly virtual guided reading group using Adobe Connect software, a PowerPoint, and headsets for students and teacher. Students will take turns reading orally and discussing prompt questions designed to increase comprehension of the text and model the types of mental questions and connections that lead to comprehension. The oral reading practice in a less-threatening environment (no one is staring at the student, he is in the comfort of his own home), and will increase confidence and fluency.

One danger of using ReadPlease is the possibility of a student becoming dependent on that technology for all reading. If this seems to be happening, I will suggest that the learning coach reduce the amount read by ReadPlease and use the paper textbooks sometimes instead of the e-text always.
**Implementation**

The virtual guided reading group and ReadPlease2003 will be used together. The reading group will meet in my livelesson “room” once/week at the same day/time each week. If I see a need to increase to twice/week, I will do this. I will email the text for the next week’s reading group to students and parents the week before. The student will copy/paste the text into ReadPlease and have it read aloud as many times as she likes and practice reading it aloud herself—highlighting and replaying any parts she struggles with. During reading group, the students will use their headsets take turns reading parts of the text out loud and listen to their classmates read. Since they will have practiced this particular text with the screen reader, their oral reading fluency should be higher than when they read a text “cold.” This allows them to demonstrate successful oral reading in front of their peers and increase their reading confidence. At several points in the text, I will ask questions like “Can you summarize what ____ just read?” “What is the main idea of this paragraph?” “Why do you think the author ____?” “Can you connect this to something else we’ve read?” By modeling these comprehension questions, students will begin to internalize the types of things they should be able to notice in a text.

**Evaluation**

I will evaluate these students’ oral reading fluency by conducting progress monitoring during our bi-weekly phone calls. I will select a section from a text that we have not read yet, and record how many correct words the student reads in one minute. Oral reading over the phone can be slightly different than in-person reading, but since the evaluation method will be consistent (always over the phone), I will be able to track progress. During the weekly reading group, I will administer anonymous poll questions that are
based on our usual comprehension questions to track student performance on these types of questions. I will also look at reading comprehension quiz scores each week.

**Cmap**

[http://cmap.ihmc.us/](http://cmap.ihmc.us/)

Cmap is a free, downloadable idea mapping program. To create a new map, the user opens the program and double-clicks on the blank screen. The basic elements are text boxes and arrows. By double-clicking on a text box, the user can enter text, then click and drag the arrow to connect to a new text box (and include a "linking phrase" between boxes). This can be repeated as many times as necessary, with boxes and arrows going in any direction. The text can be formatted to be different fonts, sizes, or colors, and can appear bold, italic or underlined. I will use Cmap to create custom graphic organizers for students with low comprehension of expository text. Using a graphic organizer will help these readers to slow down, organize the ideas in a clear manner, and show connections between ideas. It can also be used to help students organize their own ideas when starting a writing assignment.

**Implementation**

I will email parents the link and instructions for downloading the free version of Cmap. I will also create a recorded lesson of how to use Cmap—both for filling in a premade map or creating a map from scratch. For students who are struggling with expository text comprehension, I will create a map with a specific structure (to go along with a specific science or social studies assignment), email it to students, then have the students type the information in the appropriate boxes. For example, a unit on clouds would have four
different boxes for the four types of clouds described in the text, a label above them “types of clouds” and a box below each main box, labeled “features.” Depending on the level of need, I may fill in more, to model how the organizer should be used. In the beginning, I will have students email me back their completed organizer to check if they are filling it in correctly and pulling all pertinent information from the reading. They will use their organizer to study for assessments, and for some students, I may allow the use of their graphic organizers for answering essay questions on assessments.

Cmap will also be used to create an organizer in which students will type their ideas for a writing assignment. For example, for a personal narrative, the student will fill in a box for where, when, what happened first, next, last, how I felt, what I learned, etc. The student will email me his/her map and I can provide feedback, ask for more detail if needed and express my excitement about the topic. The map will serve as a pre-writing piece and can be printed out or the outline view can be exported as text. To view the text in Word, the file has to be renamed as “filename.doc”. This requires a couple steps, but would prevent having to retype a lot of the original ideas, saving time and frustration. Students can also build a concept map as a study guide, or fill-in a pre-made map for a study guide. For a student with strengths in visual or creative activities, this software will bring out those strengths, while still requiring some writing and organized expression of ideas.

**Evaluation**

As students email me their filled-in organizers after reading a text, I will check to see if they are recognizing all important information and recording it in the appropriate place. I will look for improvement in this area as they get used to using the organizer. I will also
look at all science and social studies quizzes and tests to check for improvement in answering multiple-choice and essay questions. I will also discuss the use of Cmap with parents and students during our bi-weekly phone calls. I will ask how they feel its use is affecting the student’s comprehension of text and writing composition. I will grade all written essays using the standard Pennsylvania writing rubric, and for assessing Cmap use, will specifically look at the categories of focus, content/development and organization. I will make a copy of each essay that is turned in, with the grading rubric and grade, to track writing progress. Having students type in the graphic organizer requires that they are relatively proficient at keyboarding. If the act of typing significantly hinders their ability to get ideas down, then their learning coach may do some of the typing for them, while the student practices keyboarding throughout the year to reach greater typing independence.

Microsoft Word Track Changes & Comments Tools


In our virtual school, elementary teachers usually do not see students’ rough drafts until they are physically mailed in along with all revisions and the final draft. The lag in feedback on writing is not especially helpful for students who are having trouble organizing their writing, staying on topic and including an adequate amount of detail. It also does not help students who are not using proper writing mechanics. To help students
create more organized, detail-rich, focused and polished writing, I will use Microsoft Word’s “track changes” and “comment” tools. I will use a comment like, “tell me more about _______” to elicit greater detail. I will use a comment like, “What is the main idea of this paragraph? to help the student focus on one idea per paragraph. I will highlight a word that doesn’t make sense and ask what other word could work better in its place. To prepare for a final draft, I will use track changes to change spelling or punctuation, and will include a comment of why the change was made.

**Implementation**

All students have Microsoft Word on their school-supplied computers. They will need to type their rough draft of an essay using this program. If they used Cmap for their pre-writing, they can turn their map into outline form and export it to Word. They can then create paragraphs based on their outline ideas. When a rough draft is finished, the student will email it to me. I will insert comments and track changes to provide feedback on content and organization and email the document back to the student. I will follow-up my written feedback with a phone call to discuss the student’s writing with her. She will have the document with my mark-ups in front of her and we’ll go through each comment together. She can ask any question she has about my mark-ups and after the phone call can start on revising. The student will email it to me once again for spelling/punctuation editing. As the student becomes familiar with the writing process and writing mechanics, I will put more responsibility on her for self-revising and self-editing. I may also have students use track changes and comment tools to provide feedback about one another’s papers.
Evaluation

I will be evaluating this technology along with the use of Cmap. I will grade all written essays using the standard Pennsylvania writing rubric, and for assessing track changes/comment use, will specifically look at the categories of focus, content/development, organization and mechanics. I will make a copy of each essay that is turned in, with the grading rubric and grade, to track writing progress.

As with using Cmap, using Word for writing requires a certain level of typing proficiency on the part of the student. On a case-by-case basis, I will determine if it is more appropriate for the student to dictate to the learning coach. The feedback process would remain the same, with the student doing as much of the revising as possible.

Virtual Writing Community

http://connectionsacademy.com/technology/technology_communication.asp

I will use the Message Board feature that is built into our school’s learning management system to address the need of students with low motivation to write. I will post a weekly artifact that is an interesting video, image or article to stimulate written discussion among students. Posts may only be viewed by people in our school, and will generally only be viewed by people in our class. Students will post their own thoughts about a topic, as well as respond to a classmate’s post. Bringing in a social/community aspect to writing will help students who try to avoid writing engage in it. They will be focused on the ideas, the discussion and the social dynamic, helping them “forget” about the writing part. Since the communication is asynchronous, students who are not confident in their writing or who are working on spelling and mechanics can have me or their learning
coach proofread a post before it is made public. This makes the student with low writing confidence/motivation look like a confident writer in front of his/her peers. The message board also provides an opportunity for students’ personalities to shine through, a particularly important event for a virtual student. As students become comfortable with the discussion set-up, I will encourage them to post their own discussion questions. I may also take suggestions for future artifacts or topics, to give the students more ownership in the writing community.

**Implementation**

Each Monday morning I will post a new discussion thread to the class Message Board. It will be a current newsclipping (video or article), song lyrics, or an interesting photograph or image. Each “artifact” will be accompanied with discussion questions. For example, before the state test I may post a video clip about standardized testing and ask students: Should there be standardized testing? How do you feel about taking the PSSA next month? Hopefully this will be a good way to motivate all students on a Monday morning, to get into “school mode,” but especially for students with low motivation to “do school” or specifically to write. The students will have all week to post their thoughts about the artifact, answering a particular question/s if they like or taking the conversation in a different direction. Students will be encouraged to respond to one another’s posts. I anticipate shorter responses at first, and more superficial discussion. I may direct students to view a lively discussion board elsewhere on the Internet to give them a model of what online discussion can look like. My hope is that an interesting enough artifact will motivate students to post, read, post again, read again, and look forward to communicating with their classmates through the discussion board. One post and one
response (each at least three sentences) each week will be required of all students, but posting more than this will be encouraged.

**Evaluation**

I will evaluate the writing community’s effectiveness for students with low motivation to write during bi-weekly conversations with their learning coaches. Knowing that the usual response to a writing assignment is avoidance or frustration, I will ask about the student’s response to the weekly discussion board assignment. Does the student view this as writing? As work? Does the student show signs of looking forward to posting and reading on the discussion board? Is there a particular topic that evoked the most favorable response? Does the student ask you to proofread his posts first? Does he talk about the discussion topic or other students’ ideas with you? I will keep track of how many posts and words/post the student is completing each week. If a student is showing increased motivated to complete this writing activity, I will begin to look at other writing activities to see if there is an increased motivation there. I will ask the learning coach if she has noticed attitude changes during other writing assignments.

**Possible Challenges**

Because I am using multiple technology applications to increase reading and writing performance, it may be difficult to determine with technology is responsible for growth or improvement. If a student is showing improvement, that is the most important thing. However, if one technology is contributing more than another, I want to know this, as I refine my literacy toolbox. For example, if a student is using ReadPlease and Cmap with his science text and assignments, and his science quiz scores increase, I will not know
which technology led to this increase. It is possible that a third factor may be the cause, like increased time spent on science, a newfound interest in science, or an older brother who decided to start helping the student study for science quizzes. I will try to assess if there are other factors during my bi-weekly phone calls with the learning coach and student. I will also look for patterns among my focus group. If all students using ReadPlease having increasing science quiz scores, this could be good evidence of its effectiveness.

The virtual school model puts a large responsibility on learning coaches in order for the student to be successful. This is especially true for students with literacy difficulties. Each technology used in this plan requires some help from the learning coach, at least in the initial implementation stage. Depending on each student’s need, learning coach involvement could be even greater. I will need to convince each learning coach to “buy in” to using these extra technology applications to help her student. I think this will go smoothly, but in rare cases could be a problem. Overall, I am excited about the possibilities of using these technologies with my literacy needs subgroup and seeing these students succeed.