EDIT 614: KeyStone Project

KeyStone Part I: Technology Integration Plan
Charles Lynch
Mentee: Erin Scott
School Dutchess Boces
Grade Level: 6th
Target ELA Standards:

Reading:
CCSS.ELA-LITERACY.RL.6.2

Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

CCSS.ELA-LITERACY.RL.6.3

Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

CCSS.ELA-LITERACY.RL.6.7
Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.

CCSS.ELA-LITERACY.RL.6.10
By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Writing:

CCSS.ELA-LITERACY.W.6.2.A

Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

CCSS.ELA-LITERACY.W.6.2.B

Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.

CCSS.ELA-LITERACY.W.6.2.A

Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

CCSS.ELA-LITERACY.W.6.2.B

Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.

CCSS.ELA-LITERACY.W.6.7
Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

Language:

CCSS.ELA-LITERACY.L.6.1
Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.L.6.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

CCSS.ELA-LITERACY.L.6.2.A

Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*

CCSS.ELA-LITERACY.L.6.2.B

Spell correctly.

CCSS.ELA-LITERACY.L.6.4
Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.

CCSS.ELA-LITERACY.L.6.5
Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

Listening and Speaking:

CCSS.ELA-LITERACY.SL.6.1
Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.

Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

Target ISTE-S Standards

2. Communication and collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

      a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
      b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
      c. Develop cultural understanding and global awareness by engaging with learners of other cultures
      d. Contribute to project teams to produce original works or solve problems

4. Critical thinking, problem solving, and decision making
Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
      a. Identify and define authentic problems and significant questions for investigation
      b. Plan and manage activities to develop a solution or complete a project
      c. Collect and analyze data to identify solutions and/or make informed decisions
      d. Use multiple processes and diverse perspectives to explore alternative solutions

5. Digital citizenship
Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

a. Advocate and practice safe, legal, and responsible use of information and technology
b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
c. Demonstrate personal responsibility for lifelong learning
d. Exhibit leadership for digital citizenship

6. Technology operations and concepts
Students demonstrate a sound understanding of technology concepts, systems, and operations.
a. Understand and use technology systems
b. Select and use applications effectively and productively
c. Troubleshoot systems and applications
d. Transfer current knowledge to learning of new technologies

Target ISTE-T Standards

1. Facilitate and inspire student learning and creativity Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.
c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes

2. Design and develop digital age learning experiences and assessments Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards•S.
a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

3. Model digital age work and learning Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.
b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation

4. Promote and model digital citizenship and responsibility Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.
a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources
c. Promote and model digital etiquette and responsible social interactions related to the use of technology and information
d. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools

5. Engage in professional growth and leadership Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

        b. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

Technology
The technology used for this lesson mainly will be Google Forms and Google Draw. These two tools will also be joined by YouTube as a source for the Audiobook, as well as the use of headphones and mice, not touchpads. The assistance of these technologies will benefit the learning of students reading a novel and learning from the events the character goes through at each step, trying to survive.
One: Google Forms for quizzes and daily retention questions after each chapter

1. potential application for specific literacy instruction

The potential for Google Forms in this instance of literary instruction of reading a novel, is to check the students retention of facts and events that happened in the story. Students will answer questions everyday after they read each chapter to show that they were practicing active reading and listening skills.

2. application for literacy instruction in any content area

The potential for Google Forms in this instance of literary instruction of reading a novel, is to check the students retention of facts and events that happened in the story. Students will answer questions everyday after they read each chapter to show that they were practicing active reading and listening skills.

3. application for assessment (activities)

Students will read and listen to the novel The Hatchet daily, for one period, or multiple times a day if the teacher does more than one period for reading and ELA. After reading each chapter, students will answer questions pertaining to the details the character went through. This will be done a Google Form. The assessments are set up in short answer form, but can be changed to multiple choice if the teacher would like that more as a style, or what benefits the students better.

4. application for student performance reporting

The standards that are being used directly align with that of what is required to be done in regards to reading and writing and comprehension for students in a middle school classroom. Students will be graded according to the point values that the teacher gives each question and if

the answers give specific details of the instance that the question is asking. Points will be given as yes the answer has the details required, or no the answer does not.

5. features that allow for differentiated learning

Youtube:
Using YouTube, students will be able to listen to the story without having to read it directly out of the book. It also allows for the students to work independently if there are multiple reading groups in the room at different levels. It also allows students to read at their own pace, stop pause and rewind, or click back, to re-hear a part of the story they did not understand or miss-heard.

Typeassist:
Using a type asist program can allow students to speak their answers and have the computer translate it into text for them. THis allows students who cannot type the ability to input their answers properly. Microsoft Windows 10 has this built into its operating system already and can be accessed via these instructions:
https://www.digitaltrends.com/computing/windows-10-speech-to-text-guide/ .

Headphones:
The use of headphones allows students to work independently of each other and not have feedback of where the other students are in the book. This is also a great addition for students who have problems hearing well in a classroom that can be noisey.

Open ended responses:
By allowing the students to pick the details from the book themselves, this alleviates the a stringent grading rubric. Also it allows students to use minute or broader details other than the main topic of the chapter.

Audible E-Reader:
This is an alternative to using youtube as the book is available in digital and audible copy from amazon.com.

6. compatibility with the school and/or district technology infrastructure.
The technology infrastructure that is already in place, supports this entire lesson. The only assistance that would be needed is the acquisition of headphones, and the possible unblocking of the speech to text setting on the laptop computers.
Two: Google Drawings - create a campsite as the students learn about the campsite in the book

1. potential application for specific literacy instruction
The potential literacy application for Google Drawing is that students will be able to draw out what they are thinking. This brings the concept of the campsite the main character is at to life. Altogether there are images and a movie of this book online, something that the students create themselves allows them to reference the material back to their ideas and keep a good representation of the struggle of the main character in their own mind.

2. application for literacy instruction in any content area
Google Drawing allows for projects to be done in various forms for any content area. Google Draw can be used to make images of characters, posters of topics, use as a scratch pad for

math, draw details of an item for history along with a timeline, or draw sheet music, or just draw, because every student I know still loves making colorful art in Microsoft Paint.

3. application for assessment (activities)
Google Draw in this sense would just be a check in the box, if it was done and kept up when the students add detail at the end of each chapter. Students will add to their campsite at the end of each chapter details of what happened during that chapter. This allows students to visually remember how the book is progressing while reading and listening to it.

4. application for student performance reporting - spot checking, how we'd grade their progress at the end of each session
Students will be graded by adding at least one item from the chapter each day about what they read, to their Google Draw image. Adding will earn full credit for the day, not adding will not.

5. features that allow for differentiated learning
Mouse: By using a physical mouse, students will be able to draw in a more tactile manner. A trackpad does not allow for easy hand eye coordination as a physical device such as a mouse.

Electronic Drawing Pad: Using an electronic drawing pad, students will be able to draw with a stylus that is more tactile than a trackpad. The students will be able to draw with a stylus like they would a regular pencil. This will allow students to draw like they normally would with a pencil and paper.

Tablet with Stylus: By using a tablet with a stylus students will be able to use Google Draw much as they would use a pencil and paper, while enabling the students to draw in a familiar environment.

Touch screen computer: Students who use a computer with a touch screen computer will be able to use a stylus or their finger to draw their assignment. This allows students to be able to draw much like they would be using a pencil and paper.

6. compatibility with the school and/or district technology infrastructure.
At this time all technology needed directly for this assignment is easily used within the Dutchess Boces school system. The only technologies that would be required are the ones that would allow for differentiated instruction. Most of which can easily be obtained through NewEgg.com that the school district already has a contract through, or has them as an approved purchasing company.
In addition to the two tools, what other technology resources are needed? (equipment and software)
Technology to also be used are laptop computers, usb mice, headphones, Gmail account, Google Docs for notes, and tablets for listening to the audiobook if needed.
Procedure:
Outline your procedures. Provide enough detail so that another coach could read and understand the plan you are creating. Describe how all tools will be used. Also include time frame (weeks/days/hours)

        Students over the course of twenty two class sessions will read a chapter a session, or day in the classroom with the teacher along with listening to the Youtube.com audiobook. This will be done on personal computers or tablets that have internet access YouTube.com. Audible.com, or on amazon.com through audioable.com also have the book available, however

YouTube has it for free. By doing this, it allows students to move at their own pace reading and listening, as well the assignments can be done at home if needed for homework, or if a student needs to catch up on their work to not fall behind.

At the end of each reading sessions the teacher will orally ask the students questions pertaining to the chapter of their choosing. Then using a set of already created questions on Google Forms will answer questions per each chapter to check for fluency. At the start of the story students will create a Google Draw image of what type of campsite they would like to camp at and detail what the items will be and why on a separate Google Doc.

As the students start reading they will create a Google Draw image of the campsite that the boy has to create. After each chapter, if the character added a new tool or explored a new part of the area he landed, they will add it to the image they have created. At the end they will have something that will resemble what the character had as a campsite and can compare their prefered campsites to what the charter lived in.

While students are doing the campsite work, they will share their original drawings with the class and why they made them the way they did. Then they will show the campsites to the class of what they felt represented the campsite the main character created. At the end of the novel students will take an exam on Google Forms and show their retention of the book, life lessons and its meanings.

The ending project will be a large printout of images from the book that students will fill in information pertaining to the novel in full sentences. The students can then cut them out of the larger piece of paper, color them and paste them onto a background that looks like the woods. This will then be hung up somewhere in the classroom and presented if the teacher decides that as a method of instruction.

Time frames:
Per each day:
- (1 to 5 minutes) Intro to chapter: Teacher discussion and talk about what happened in the last chapter.
- (5 to 12 minutes depending on the chapter) Listen to the next chapter of the audiobook.
- (5 - 10 minutes) Complete the Google Form for each daily chapter.
- (10 minutes) Add to the campsite images on Google Draw.
- (~5-~10 minutes) quiz on Google Forms at chapters: 5, 11, 16, end of novel.
- Remainder of the last class reading session to complete their drawings and book report document.

Assessment Method
Mainly the assessment method will be the graded Google Forms. The questions that are multiple choice are graded automatically and the short answers, the teacher will grade individually. Secondly the Google drawing image will be graded on content added not ability to draw, short quizzes on Google Forms, lastly the book report presentation as a summation of the book.

Using those methods students have the ability to use multiple tools to differentiate their assessments. This also allows for students who are stronger in one ability to show that and not have it affect their other parts of the grade for this assignment.

TPACK

Content:
The integration plan to address TPACK is simple in this case. The content is aligned well with the literary state standards and ISTE standards to match the pedagogical tools that will used, that are the technology knowledge portion of the TPACK model.

Pedagogy:
By reading and listening to the book, it helps students retain the information better and learn the morals of the book.
Technology:
The tool for this is youtube, Google Forms, and Google Draw. pulling the assistments together in a technology sense, makes everything fit nicely together for the TPACK model of learning fully.

KeyStone Part II: Implementation Case Study
Candidates will coach their mentee in the implementation of the technology plan in order to acquire authentic assessment data. Candidates will write a case study about the implementation process and the assessment of student learning and technology literacy.

This case study was conducted as best as time allowed aloud in my classroom for the school year 2016 to 2017 at the end of the year. The classroom was a special education classroom situated as a 1:6:1 environment. The classroom has three different reading groups at grade levels of first, third and sixth. The lesson that was done was designed for sixth graders reading the novel The Hatchet written by Gary Paulsen. Two students would read the novel with the plan given above and finish with a book report geared towards the students reading levels and writing abilities.

Introduction

This section is intended to introduce the case study and explain its significance. What is this case is about? Why is it relevant to readers?

This case study is designed to study how students would rather read material and answer questions about the novel itself. The students in the classroom struggle with writing two sentences on paper, but put them in front of a computer and they'll ask if they can type a story for fun. The concept of writing verses typing has plagued my middle and high school years and always found that typing drew the ideas out of me more efficiently with more value to my words. Therefore to assist struggling students they will start reading the book as a group in class for one period a day and progressively bring more technology into the lesson to assist in various ways.

Situating the Case
In narrative form explain how you conducted the implementation plan, beginning with your rationale for selecting your mentee, and ending with details about the assessment of student learning.

The mentee I chose was the current teacher I worked with last year, Erin Scott. We have worked together the past three years and she always comes to me to add more technology into her lessons. For the most part she is really proud she can copy and paste on a computer so this was something I had to sneak in at the end of the year. We planned on reading The Hatchet either way, but I always try and sneak in whatever technology I can. Generally when I ask to do certain things I get confused looks, so I sneak it in where I can. In this case I gradually moved the students from reading the book out loud as a pair with the assistance of the Erin, or I reading with them splitting the chapter into three parts where we'd each read a page and switch readers. This wasn't very productive during during the first period of the day, when we would get interrupted by the never scheduled daily announcements, or stagelling students walking into the room.

The lessons were set up a such: (originally)
- Read chapter # as group
  - If needed to catch up by self
- Answer questions on worksheet in binder
- Write two complete sentences about what happened in the chapter read
- Write two complete sentences about what the student thinks will happen in the next chapter

After a week or so of completing the assignments in this manner, a student went out ill and I started implementing the technology part of the lesson since he would be able to catch up. I knew already from the months and books we had read together before hand that the students did not like to write and read aloud. Writing is a struggle for some sixth graders, but in my classroom it was more difficult. I transitioned them over to reading while listening to the youtube audiobook as a fall back plan. During the end of the year, teachers would have to go to meetings and use personal days, so this fit nicely. We would set up the room so that the student who was to read with the computer would be doing that during the times when only one teacher would be in the room at a time. They would listen to the story while reading along as I checked in and worked with the other two groups as well. One group would always be on a set of computers, then rotate throughout the day. In this fashion it fit nicely into the main teachers routine (Erin) and kept the room running nicely. After the reading the student would work on their questions and have them checked by myself or Erin.

The response from the students was clear when the other student came back a week later from being ill. The same was done for that student as well. They both prefered it being read to them as an audiobook rather than from each other or the teacher. It was easier to pause and find your place, and nobody stuttered on words. A couple of the reactions to reading with the audiobook.

Data Analysis

The formative assessments were conducted mainly on paper documents as this is where the students wrote their answers. The teacher does not grade by how well the answers are stated, but rather if there is information enough to answer the question and asks them to go further orally is the answer is not complete. This is graded on a check minus, check, check plus grading scale and more for completion then anything else as the students are alternatively assessed.

For summative, students completed a book report printable. They were directed to complete a rough draft of their answers first. Checked for correct material and full and complete sentences and then transferred onto the final copy forms. Graded the same way as the formative assessments were on a check based scale for content and correct material.

In this way students met the above standards (1) completely. The technology use was integrated later on in the lessons and was able to be fully integrated due to time restraints. (Documents attached on website: http://cslynch42.wixsite.com/technology/the-hatchet-lesson) Even without being able to use the perfect worl senario of documents the students were able to learn more efficiently then the prior methods. Also they learned what AudioBooks are and said they enjoyed them.

▪ Describe in detail how student achievement data was systematically collected and analyzed. If data was analyzed quantitatively, explain. If the data was analyzed qualitatively, explain the types of qualitative analysis.

Student achievement data was collected daily on a check based system designed by the teacher. No formal grade was given per assignment. The students were more likely to do their work however when left to their own devices. They would read and listen to the story, write their answers and sentences and ask to be checked. I'd ask them what they thought of the chapter and what will happen next to have them state their ideas a second time not just on paper to prompt conversation about the topics in the novel. Since this was the end of the year, achievement was based mainly on if the students enjoyed the book or not and what morals they could take away from it.

▪   Describe the interpreted results
The results can't be interpreted in this case in any form of grade, or number. I did not have formal control over whether or not the students passed or not as a whole. That was left to the teacher of the room. For the most part, I can say this: The students enjoyed it more. The sighs went down, the productivity went up, and the complaining went down and best of all the two students enjoyed the book were able to talk about it with the teacher and each other outside of the reading class section and learned new skills in technology such as using audio books for fun and school work.

In this section also explain how validity and generalizability (quantitative studies) or trustworthiness and credibility (qualitative and critical studies) of the data was ensured.
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I can't say how valid a two student study is. A bigger sample group would be desirable for a lesson such as this. That is why I am designing it and posting it on my website for other teachers around the world to be able to use what I have created in their own way, with the documents that we used in the classroom as hard copy examples. The website to the date of this assignment is now fully completed, but the chapters of the audiobooks are posted in order and easily playable from the webpage itself without further navigating the internet. The only true validity was that students who could not learn as well reading out loud from a book to a peer and teacher, found it easier to listen to an audiobook then struggle through their own speech issues, or their peers.

Conclusions, Limitations and Suggestions for Future Research

▪   Describe the implications of the findings within the larger context of teaching and learning.
For a broader context of the teaching and learning, it is important for a teacher to continue to grow their technology use and not stick to the old ways as a complete fall back all the time, even if it is easier to plan with at the moment. Take a few hours plan a really great lesson and you will be able to slightly adapt it when you need to easily on a computer for years to come. Students will learn by different tools each year and they will learn how to use more technology faster than ever before as it becomes less expensive and readily available. It is our duty to do our best to keep up with technological trends for learning sake.

▪   Describe how the results and finding will improve instructional practice and maximize student learning
The data found in this lesson shows that adding technology into a lesson format that has been used all year can change the perspective of the work for the students. They are already being hard wired to do their work fully on the computer and as much as it is a shame to lose the pencil and paper methods, for some students it is not within their ability range mentally or physically to complete the work as stated in the older format of this lesson.

▪   Include implications for practicing educational professionals.Limitations should openly acknowledge all limitations of the implementation plan.

The main limitations of this lesson plan was the completion of the resources on the internet due to lack of school days and planning time between myself and the main teacher of the room. What is posted on my website at the moment is the hybrid style lesson we did as I snuck in the audiobooks and used the documents available via the link my website. The students did enjoy the lessons and many of them can be created in an online document easily and will be in my free time, so the teacher can use the lesson fully online next school year, if I am in their room or not. In turn other classrooms use the novel during their years curriculum as well, so the lessons can be passed around the building easily by an email of my website link. Eventually this is something I would like to do for all of my lessons, but will be build upon as the years go on to create a resource for the teachers I have met over the years to use in their classrooms. Even though the lesson wasn't fully able to be used, the teacher thanked me for my input as always at the end of it seeing that it worked well with those students.

I believe that the students took something better away from this assignment then a grade, they learned they can do assignments in a different way then they would normally and that the change of an assignment can be beneficial to their learning and can make it fun. At the end of the day, that's all we can hope for. To spur further learning.