Digital Storytelling in Response to the Common Core Standards in English Language Arts: A Case Study of Two Middle Grades Classrooms

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An investigation of teacher practice using digital storytelling as an instructional approach to the new English language arts standards.

The researcher followed the work of two middle school language arts teachers over a six-week period through their initial planning, implementation, and assessment of student-created digital stories within a unit of instruction centered on S.E. Hinton’s novel, *The Outsiders* (1967).

Students’ work focused on analysis of theme, characterization, conflict or setting in the novel.
1. How do teachers approach instructional planning for a reading/writing unit that incorporates digital storytelling?
2. What instructional strategies do teachers use in a reading/writing unit that incorporates digital storytelling?
3. How do teachers help students acquire the technology skills needed to produce a digital story?
4. How do teachers monitor and assess student learning during and after a unit on digital storytelling?
5. What are the challenges of implementing a reading/writing unit that incorporates digital storytelling?
Relevant Literature

The process of researching, planning and producing a digital story:

- Encourages reflection (Jenkins & Lonsdale, 2007; Genereux & Thompson, 2008; Sandars & Murray, 2009)
- Improves reading and writing (Gregory & Steelman, 2008; Kajder, 2004; Sylvester & Greenidge, 2010)
- Increases understanding of content (Sadik, 2008)
- Facilitates critical thinking (Borneman & Gibson, 2011)
- Helps learners to construct meaning (Rossiter & Garcia, 2010)
Digital storytelling is an integrative medium, requiring a blend of oral, written, art, and digital skills that improve literacy and expression in all areas (Ohler, 2008).

The process of constructing a digital story is parallel to the writing process (Fries-Gaither, 2010).

Student-centered learning environments are compatible with the use of computers in the classroom (Chen, Calinger, Howard, & Oskorus, 2008; Pitler, Hubbell, Kuhn, & Malenoski, 2007; Prensky, 2010).
• Use of the Internet (for pedagogical support) poses unique challenges as teachers anticipate, monitor and assess student learning (Wallace, 2004)
• Even with extensive planning and preparation, teachers face many “unknowns” when teaching with the Internet (Wallace, 2004)
• Teachers beliefs about how people learn influence the environment they create to help students acquire technology skills. (Levin and Wadmany, 2008)
### Case Study Strategy (Yin, 2003)

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>The study’s question,</td>
<td>Which of the questions – ‘who’, ‘what’, ‘where’, ‘how’ and ‘why’ - are to be answered? The ‘how’ and ‘why’ questions are most appropriate for the case study strategy.</td>
</tr>
<tr>
<td>Its propositions, if any,</td>
<td>What are the possible outcomes of the research? Which outcomes does the investigator expect?</td>
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<tr>
<td>Its unit(s) of analysis,</td>
<td>Which is the object/phenomenon under investigation?</td>
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<tr>
<td>The logic linking the data to the propositions, and</td>
<td>Which techniques will be employed to analyze collected evidence and compare it to the study’s propositions?</td>
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<tr>
<td>The criteria for interpreting the findings.</td>
<td>Which measures help considering if the findings support the propositions made?</td>
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Methodology

- Qualitative approach
- Descriptive case study (*how, what* and *why* questions)
- Propositions (literature, Wallace’s theoretical framework)
- Triangulation
  - Interview Guide
  - Classroom Observation Guide
  - Wiki spaces for teachers and students
  - Artifacts of teaching and learning
Study Setting

- Suburban, mid-western middle school, serving grades 6-8
- Two grade seven English Language Arts Classrooms
- 238 students, mixed ability levels
- Teaming concept for planning, scheduling and instructional delivery
- Flexible block schedule
- One-to-one (BYOD) laptop initiative
Student projects focused on analysis of theme, characterization, conflict or setting in the novel.

In addition to using digital storytelling software, students worked independently and collaboratively using the Internet, a wiki site, Google Docs, Schoology, Zotero, Symbaloo, and TodaysMeet.
Data Collection

- Three-part semi-structured interviews with teacher participants to capture insights at each phase of the project
- Notes and video footage from nine classroom observations
- Notes from informal conversations with teachers and students; relevant correspondence between the teachers
- Teacher-created artifacts
- Student work in progress, collaborative/peer review environments, and students’ final digital stories.
PART I: Interview to be conducted at the onset of the research (during the teacher’s planning phase).

Research Question: How do teachers approach instructional planning for a reading/writing unit that incorporates digital storytelling?

- What are the learning objectives for the unit you are currently designing?
- What are some of the things you must consider when you are planning a new unit in which technology will be integrated?
- What made digital storytelling an appealing component in this unit? (What makes this assignment a “good fit”?)
- Were there any special skills you had to learn to prepare for this unit? If so, please explain.
PART II: Interview to be conducted during the implementation of the digital storytelling unit.

Research Question: What instructional strategies do teachers use in a reading/writing unit that incorporates digital storytelling?

How do you help students get ready for digital storytelling?
  • Before reading
  • During reading
  • After reading

What instructional materials do you use to help students plan their digital stories?

What resources do you provide to students while they are working on their digital stories?
Teacher Interview Guide

- Describe the learning arrangements you use while students are working on technical aspects of digital storytelling (i.e., independent work, small group, pairs, triads, whole group)

  *Research Question*: How do teachers help students acquire the technology skills needed to produce a digital story?

- What kind of help do your students need when they are using technology to create a digital story?
- What strategies/techniques have you found to be most successful in providing the help and support that your students need?
Teacher Interview Guide

- **PART III: Interview to be conducted at the conclusion of the digital storytelling unit.**

  *Research Question:* How do teachers monitor and assess student learning during and after a unit on digital storytelling?

  - How do you ensure that students are staying “on track” while they are working on a digital story project?

  - How do you evaluate student work at the end of the unit?

    *Research Question:* What are the challenges of implementing a reading/writing unit that incorporates digital storytelling?

  - What obstacles or challenges did you or your students encounter while working on digital storytelling?

  - How did you overcome the challenge or resolve the problem?
Classroom Observation Guide

Description of the Physical Environment

- Room arrangement
- Computer area
- Placement of computers
- Technology supports (i.e., task cards, schedule of student rotation, how-to guides)
- Displays of student work

Learning activities

- Whole group
- Small group
- Computer
- Other

Teacher’s role during computer work
Welcome to the Digital Story Project

This is a place to share ideas and plan a digital story about the novel *The Outsiders*. You will be able to post your work and talk about it with others in the class. To go to your group page, click on your group number in the Navigator window on the right.

![Image of The Outsiders]

What is a Digital Story?

*Example* of a digital story based on Robert Frost's poem "Nothing Gold Can Stay,"

A digital story is a short video that communicates ideas and experiences. You will use pictures, text, music and narration to tell a story about your experience with *The Outsiders*. While you are reading the novel, you can begin thinking about the story you’d like to create. Here are some ideas to get you started:
Listen.

I like the quotes she has and the music choice and how the slides go by slow enough so we can read it
CHASE BOWDEN; at 9:41 AM, 24 May 2012 via web

very nice backgrounds and the them of it fits it well
colin thompson at 9:41 AM, 24 May 2012 via web

I think the music fits the topic
John and Elizabeth!! at 9:41 AM, 24 May 2012 via web

I like how the words are often on the photo, it really ties the photo and the message together
McKenna at 9:41 AM, 24 May 2012 via web

Plus, she tied it into the letter that Miss Lang read us from S.E. Hinton! That was cool. :) - Katie and Kristina

Talk.

What's your name?

Join.
Listen.

great pictures, it's just the fact that you sound like you have a mouth full of sand
Ben Gottfried at 11:47 AM, 24 May 2012 via web

@jacob i agree
Meghan H. at 11:47 AM, 24 May 2012 via web

No music, and pretty much no narration, because I have no idea what he is saying!!
Hailey Beiswanger at 11:47 AM, 24 May 2012 via web

nice words, a little repetitive
Kate G & Brooke W at 11:47 AM, 24 May 2012 via web

I agree
Ben and Patrick at 11:47 AM, 24 May 2012 via web

same text over and over again......
connor and deni at 11:47 AM, 24 May 2012 via web

Talk.

What's your name?

Join.
Data Analysis Techniques

- **Descriptive framework** – served as a structure for interpreting the case and aligned with the research questions
  - Planning
  - Implementation
  - Assessment

- **Linking data to propositions** – focused analysis allowed researcher to describe/explain phenomena in terms of existing theoretical frameworks (or reject those frameworks)
Findings - Planning

- Both teachers possessed solid content knowledge and were able to clearly articulate the skills and concepts the unit would address.
- Digital storytelling was selected primarily because teachers believed it would motivate and engage learners better than a traditional paper-pencil task.
- Learning arrangements (i.e., whole group, independent, pairs small group) were a critical component of planning.
- Technology tools were selected to align with learning arrangements.
Findings - Planning

- Technology pre-requisite skills were an important factor in planning (leveraging previously-learned skills; making time to learn new skills)
- Teachers viewed students’ work in concurrent “layers” – the “book layer” and the “technology layer”
Findings - Implementation

- Storytelling was introduced at the onset of the novel study; teachers wanted students to have time to “percolate.”

- Teachers integrated planning tools – group brainstorm, story map, story-board – during the novel study (Robin’s 70/30 rule).

- Wiki and Google Docs allowed students to collaborate across class periods.

- Student work in Google Docs or the wiki space was immediately available to teachers.
Findings - Implementation

- Learning materials were available online; “just-in-time” technology support.
- Team teaching in the larger “Commons” area allowed teachers to complement one another’s strengths.
- Students were encouraged to work together, to help one another solve problems, and to share solutions with the class.
- Both teachers were open to learning from/with their students.
Findings - Assessment

- A digital storytelling rubric was used consistently – at the onset of the unit to evaluate models, throughout the unit to inform revision, and to evaluate final products.
- There was greater emphasis on formative assessment (the process) than on summative assessment.
- Students engaged in self and peer assessment. Peer assessment appeared to be a more compelling force for revision than teacher feedback.
References


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