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Digital Storytelling Using Both Keyboard and Pen

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Abstract

The digital media provides multiple platforms for nurturing creative thinking and training of writing. The keyboard and pen however are not mutually exclusive (Faranosi, Lim and Roll, 2016) based on aesthetical reasons, technological reasons and practical needs of individual learners. This chapter shares three case studies from an undergraduate creative writing class using blended model of pen and paper, social media and Blackboard, an online learning platform. Storyboards from a digital storytelling exercise and project, students' self-reflections and peer comments are discussed to illustrate how creativity, writing skills and digital proficiency can be nurtured through a blended and collaborative learning environment.

Keywords: Digital Storytelling, Creative Writing, Blended Learning, Collaborative Learning

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My sincerest gratitude goes to the five innovative digital storytellers who have generously allowed me to quote their work. My heartfelt appreciation and best of wishes also to the thirty-nine brave young artists who have created stories and shared with me in their learning journey.

Introduction

Digital storytelling has been employed in a language classroom for training of an array of professional and academic skills meeting the needs of the digital era. The genre requires a unique way of telling authentic and imagined experiences using features of multimodality and hypertextuality (Petroni, 2011) in new media. Digital stories often contain emotions and it demands critical interpretation and sensitivity to reveal human responses to stimuli of the senses. This would mean an acute awareness of human emotions through senses of sight, hearing, taste, smell and touch can be conducive to training of creativity in a creative writing class. At the same time, ability to critically reflect on such experiences are of equal importance in a good story.

Development of sensitivity in the creative writing classroom using new media therefore is associated with nurturing of critical thinking, creative thinking and writing skills in addition to digital literacy. Although the creative process emphasizes individuality and original thinking, learners can need to develop skills of editing and critiquing in producing a digital story. The teaching and learning approach therefore suggest a combination of blended learning (Holland, 2017) and collaborative learning in a computer-mediated environment (Warschauer, 1997) or through web-based interaction (Neo, 2003; Woo and Reeves, 2007) to encourage learner autonomy, peer collaboration with appropriate teacher guidance. More importantly, in providing options and opportunities for learners to acquire digital literacy and creativity.

The digital media provides multiple platforms in nurturing creative thinking and training of storytelling techniques. The keyboard and pen however are not mutually exclusive (Faranosi, Lim and Roll, 2016) based on aesthetical reasons, technological reasons and practical needs of individual learners. Although quantitative studies have explained reasons for student preferences to traditional tools and digital devices and noted cultures may also have an impact on such choices, this research examines student artifacts and uses case method to conduct a qualitative study of students' acquisition of digital literacy.

The data was collected from an undergraduate creative writing class in Hong Kong using a blended model of pen and paper, social media and Blackboard (an online learning platform). Storyboards from a digital storytelling exercise followed by a project will be used to illustrate three case studies on students' creative process. Peer comments and self-reflections are also collected to gauge the students' learning and understanding of digital storytelling techniques and address the following questions:

(1) How can the blended and collaborative learning environment accommodate student needs and preferences in developing digital storytelling techniques?

(2) How can a blended and collaborative learning environment encourage both the development of creative and critical thinking skills?
(3) What do the peer comments and self-reflections reveal students' acquisition of digital storytelling techniques?

Background

This study is built on data collected from the researcher/teacher's two classes of a thirteen-week undergraduate course, ENGL3011 Creative Writing in New Media. The course was offered by the Department of English at the Hong Kong Polytechnic University from September to December in 2014 and 2016 respectively. Altogether 39 undergraduates of major or minor in English studies have completed the course.

The *course objectives* include:

1. Introduce and apply the principles of communication in reading and writing.
2. Introduce and apply multimodal literacy functions and practices in reading and writing.
3. Study and apply how multiple modalities are used to create, convey and exchange meaning in the online and digital communication environments.
4. Compose in multiple modalities to create, convey and exchange meaning within the online and digital communication networks.

In terms of indicative *learning outcomes* specified in the syllabus, the skills involved belong to professional/academic categories (items a to c) and all-round attributes (items d to f).

(a) apply principles of communication and knowledge and techniques of multiple modalities to reading and writing;
(b) apply knowledge about multimodal literacy functions and practices in consuming and composing writing in online and digital environments;
(c) apply multiple modalities in writing within the digital communication networks;
(d) communicate effectively in creative writing and project presentation;
(e) learn actively from one another; and
(f) think and reason in a critical and creative mind, especially in applying different modalities in creating meanings and composing.

The training of applying multimodality in writing and development of digital literacy require students to think and write both critically and creatively. By using a traditional classroom and a computer laboratory, the teacher attempted to combine face-to-face class interaction with digital technologies to provide a blended and collaborative learning environment. With the application of social media and online learning system, Blackboard, the students attempted writing tasks both in class and after class. When traditional writing tools like pen and paper were used, students

usually would digitalize their hand-written work and share them online for peer critique and teacher's grading.

The assessment components of the course include three exercises and a project on digital storytelling. This chapter discusses samples from a one-minute digital storytelling task and a three-minute digital storytelling project. Detailed assignment guidelines and rubrics can be found in the appendices.

Write Brain Exercises

In the first seven weeks of the course, three individual writing tasks (see Appendix I Assignment guidelines on write brain exercises) were assigned. These exercises are adaptations of examples from Bonnie Neubauer's book (2005) about creative writing. They were adapted for step-by-step training of audio and video digital stories. Students were required to complete the following items and share them online in digital or digitalized format:

1. one-minute audio autobiography
2. one-minute audio-visual autobiography
3. one A4-page storyboard retelling a digital story about sharing by Caritas
4. scripts of a major plot in the Caritas story for a one-minute screen production

A rubric template (see Appendix II, rubric for exercise 3) was distributed in both hard and soft copies to conduct an in-class peer review of each exercise. Students need to submit a completed peer review form with grading in hard copy to the teacher and post their comments online for the reviewee. The same rubrics were also used for teacher assessment. In this study, only items 3 and 4 from write brain exercise 3 will be collected for discussion.

"Let's Tell a Story!"

On completion of the exercises, the students then chose to work in small groups or individually on a three-minute digital storytelling project (see Appendix IV Assignment guidelines on "Let's Tell a Story!"). The project aims to provide opportunities for students to further develop their creativity writing skills and digital literacy.

To nurture critical thinking skills and further enhance digital literacy, assessment of the two assignments also include peer reviews and self-reflection in response to the peer comments.

When the course was first offered in 2014, a course page was set up on Facebook functioning as an online learning system to share files, conduct peer review, submit and grade assignments. However, when the course was offered again in 2016, for ease of file management, Blackboard (an online learning platform) was used for the same purposes.

Literature Review

Digital storytelling combines narrative with digital contents in the format of images, sound, and video, to create a film. It often includes elements of imagination, authentic experiences and emotions. Digital stories belong to genre of new media featuring *hypertextuality* and *multimodality* (Petroni, 2011). Use of computer technologies for recording and editing of audio and video are essential for production and sharing of them.

While tools of the digital age are considered as "assistive technologies for the artistically challenged" in Ohler (2013: 4), a generation termed as *digital natives* in today's new media classroom could also be "technically challenged". Such challenges can be found in a survey (Kennedy and Fox, 2013) conducted with 1,130 first-year undergraduate students from The University of Hong Kong. It was found while access to learning technologies could be very high in Hong Kong, only about 54% of the respondents used computers monthly to create or edit audio and video while 28% had no experience in using computer technologies for such purposes. On student perception of learning technologies, less than 25% of the respondents agreed that creating audio/video was useful for their studies.

In a recent report (Becker et al. 2017) on new media educational trends however, a call for accelerating technology adoption in higher education proposes long term goals to advance cultures of innovation and deep learning approaches; mid-term goals to grow focus on measuring learning and redesign learning space; and short-term objectives of blended learning designs and collaborative learning. At the same time, wide application of electronic communication devices in the workplace also demand improved digital literacy to facilitate communication and develop quality digital contents. Specifically, the need of a workforce to aggregate information across multiple channels by updating content and status, search for important content, organize and share functions for individual and collaborative sense making (White, 2012).

The university curriculum therefore sets priority on the training and application of new media tools. In a creative writing classroom using new media, learning to create quality digital story requires traditional storytelling skills as well as digital literacy (Ohler, 2013). On teaching of multimodal and digital literacy in L2 settings, Lotherington and Jenson (2011:298) explain that digital literacy "assumes visual literacy and entails both the ability to comprehend what is represented and the ability to comprehend the internal logics and encoding schemes of that representation."

Many teachers are aware of the benefits of new media and digital technologies (Robin, 2008; Sadik, 2008). They also are open to the practice of blended and collaborative models in creative writing training (Ohler, 2013). Holland (2017) defines

true blended learning as not just combines both online and in-class learning activities, but also affords students room of innovation and active control over ways of learning, pace of learning and spot of learning within the classroom. However, there are few studies explore students' preferences and needs in such models of learning from an Asian context. In addition, there is also a need to share pedagogical design and assessment of a creative writing class using new media.

Essential components of a compelling digital story comprise a call to adventure, problem-solution involving transformation and closure (Ohler, 2013). Digital storytelling projects therefore offer opportunities of cultivating authentic workplace skills. Practicing of digital technologies are found to be constructive in developing creative and critical thinking skills (Anderson, Macleroy and Chung, 2016). Creating a digital story often taps skills and talents in art, media production, storytelling and project management. Digital, oral and written literacies are thus developed in an integrated fashion by sharpening critical thinking, research, and writing skills (Neo, 2003; Robin, 2008; Lambert, 2013; Ohler, 2013). Through creating narratives using storyboard, researching on background information, drafting scripts as well as engaging in audio and video production, students can develop the power of their own *voices* and become heroes of their own learning stories. In addition, digital storytelling encourages learners to be *active* participants rather than passive consumers in a society saturated with media (Anderson, Macleroy and Chung, 2016).

Effective assessment with formative feedback is conducive in enhancing digital literacy, creative writing and critical thinking skills. According to Boud and Molloy (2013) in their book on formative assessment in higher education, a tripod of three types of assessment including those of peer, self and teacher can engage students in an active role of soliciting and using feedback to improve their learning experience. Ohler (2013) agrees with Boud and Molloy (2013) in formatively assess digital story projects by grading the planning process, media grammar and use of media, understanding and presentation of content, teamwork and use of resources. Public participation in the process of assessment is also possible through online sharing and performing it before an audience to collect feedback.

On assessing digital storytelling projects, Ohler (2013) emphasizes an assessment of all documents and media pieces, especially the *written* work leading to the final project shown on screen. The rationale of such a suggestion is that story creation produces a cornucopia of assessable material and much of them is of *traditional* in nature. It also echoes a quantitative study on student preferences for the pen and screen (Faranosi, Lim and Roll, 2016) due to technical, aesthetical and practical reasons.

Studies on digital storytelling training have researched on various topics include integration of technology (Robin, 2006; Sadik, 2008; Yang and Wu, 2012), fostering of a creative community and practice of student reflections (Blocher, 2008;

Lambert, 2013), enhancement of critical thinking, reading and writing skills, and student motivation (Barret, 2006; Robin, 2006; Morgan, 2014; Yang and Wu, 2012; Nam, 2017). However, few qualitative studies can be found on exploring students' creative process of a digital story production. By sampling artifacts of storyboards with references to peer comments and self-reflections, this chapter investigates stages of planning, drafting and editing. More importantly, it attempts to understand challenges faced by students in their learning of creative writing using new media. Lastly, it also reflects on pedagogical design of creative writing training in an Asian context.

Pedagogical Design and Practice of Learning Models

Adopting both collaborative and blended learning models, the teaching pedagogy revolves around notions of learners' autonomy while interdependence (Johnson and Johnson, 2009) is also respected. Digital literacy can be developed as a result of respecting individual needs and learning preferences rather than a passive mode of learning using designated tools and software.

As many students use the Facebook to discuss group projects and share learning resources, it was a natural option to set up a closed group for such purposes. It can also facilitate communication and learning outside the classroom. In addition, by using a discussion forum on Blackboard to upload completed work for peer review, students can actively learn from peers and collaborate with them both in individual tasks and group projects. At the same time, anonymity is possible to reduce possible bias and peer pressure during peer review. Practically, the teaching strategies can be summed up by five principles of teaching innovation based on a study (Trauth and Booth, 2014:216-217) examining student engagement in a technology-mediated environment.

1. Leverage what students do, know and think about
2. Active learning
3. Emphasis on signature projects and practices
4. Collaborative learning
5. Flexibility

In terms of the fifth principle, it is a result of the first four by considering individual needs of the enrolled students, especially in opening up options for available digital media tools. It is also important to allow students to digitalize their work when traditional tool like pen and paper are used. This kind of flexibility can also be found in the following section on development of the digital story telling project.

Stages of Learning and Assessment in Digital Story Production

Over a thirteen-week long practice of three individual tasks (write brain exercises) and an individual or small group digital storytelling project, learning and assessment comprised three key stages (see Figure 1, page 9): pre-production, production and post-production. In addition to individual or group efforts of the project, peer influence included online and paper-based comments to the first draft. Individuals or groups working on the story also were required to submit self-review of the draft and self-reflection with critique of the completed story and response to comments received. The review and reflection were conducted during stages of production and post-production. While the first draft was not assessed, students' peer comments and self-reflection were submitted for teacher's assessment. They form a part of the formative assessment in addition to teacher's grading of the completed digital story. In addition to peer collaboration, teacher guidance was provided during voluntary project consultation in the pre-production and production stages.

Stage 1 Pre-production (Week 1-7)

At this stage, the three write brain exercises aimed to help students practice the use of audio-visual and linguistic devices by crafting/drafting, editing and reviewing such contents collected through a daily setting. The one-minute production of sounds, images, hand-drawn storyboards and written scripts trained students on skills of recording and editing of multimodal texts.

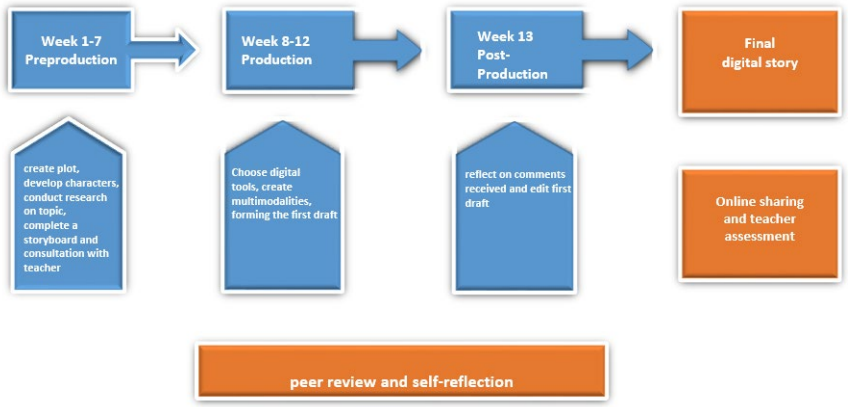
Stage 2 Production (Week 8-12)

Building on their experiences from the write brain exercises, students at this stage started to form ideas and selected semiotic resources to prepare a second storyboard for the production of a three-minute digital story. Scripting remained to be an important training of the creative writing class. By now students should also have created raw clips and further developed their characters using dialogues.

Stage 3: Post Production (Week 13)

On completion of a draft version of the digital story, a face-to-face peer review was conducted. Students could self-arrange peer review in class or seek comments from a target audience who may not take the course. To elicit responses and facilitate discussion, students were encouraged to upload their work online. The students also needed to self-reflect on their work and edit the story by considering peer comments received before submitting it for teacher's grading. At this stage, students could practice critical thinking and develop evaluative skills by critiquing work of others and editing their story with help from peers.

The students could find their own commentators (in class or not from the class) to critique the draft. They were also encouraged to share their finished story online with the public through digital publishing sites and social media platforms.



Three student projects with nine artifacts including storyboards and screen captures (see Table 1) were collected for a qualitative analysis with reference to peer comments and self-reflections. These projects therefore form three case studies detailing the five students' learning experiences. Pseudonyms are used in this discussion for privacy of the students.

Project Member	**Artifact Number**	**Peer Commentator**
Janet and Peter	1, 2, 7	Emily and Natalie
Emily and Natalie	3, 4, 8	Janet and Peter
Sally	5, 6, 9	a classmate and a friend

Table 1. List of artifacts completed by the students and arrangement of peer review

The analysis starts with a comparison of storyboards from write brain exercise 3 with those from the digital storytelling project. It aims to track the students' acquisition of digital storytelling techniques. In addition, peer comments and self-reflection are used to address research questions on students' preferences and needs in a blended and collaborative learning environment as well as their acquisition of creative and critical thinking skills.

Screen captures (see Figure 5) of the three digital storytelling projects help to explain the level of digital literacy among these students by examining the digital tools they have employed.

Discussion and Analysis

Case Study 1: Talents of Janet and Peter

As students' choice of pen and paper could be explained by aesthetical, technological and other practical reasons (Faranosi, Lim and Roll, 2016), the hand-drawings (see Figure 2) by Janet reflect her talents of using lines and colours. Water colour drawings were effectively presented as seen in artifact 1, a storyboard submitted for write brain exercise 3. By the time Janet and Peter submitted their storyboard for the digital story project, use of visual effects like shadow and light are noted in artifact 2. Such skills were not so obvious in their first storyboard. Janet and Peter's storytelling techniques combine both photographic skills and hand-drawing skills to create cinematic effects.

Peer comments and self-reflections from the students shed light on the stages of their preparation and explain the decision and choices made in their production of the digital story. On the choice of hand-drawing in creating the storyboard and the digital story, peer commentators Emily and Natalie appreciated its appropriateness because the main character is a dog:

> *The drawing suits the theme of the story. Most of the time, the face of the "dog" did not show up, paving the way for the ending. Moreover, the blurring scenes at the end demonstrate the reviewee's ability in drawing.*

They critiqued also on the use of language in describing the character and title of each scene:

> *Some of the word choices, like "fetch", "runs so fast" and "snatched", could reveal that Sandra may not be a human. The title for each scene is good, especially for the title "The Winter". The freezing cold weather in winter echoes with Sandra's emotions of being punished.*

Regarding structure of the story and development of the plot, the peers gave very positive feedback on its exploration of social issues. They even suggested how the story could be further used.

> *The flow of the story is smooth, starting from the introduction, followed by a climax and a surprise in the ending. The story allows us to reflect on the relationship between human and pets. ...Since the story is meaningful and indicates the social issues of abandoning pets, it would be great if the story could be published in the pamphlet of organizations like SPCA, or as a book for adults reading.*

On use of audio, the commentators thought the background music matched with the contents. However, they thought improvement necessary in the sound recording:

> *… it would be better and more realistic if a child's sound and a mother's sound are used. It would be better to add the crying sound of dog at the end to appeal to people's pathos.*

Technically, Janet and Peter considered themselves not as "competent film makers" while acknowledging their preferences of using their talents in painting and voice-covering, especially considering the involvement of an animal character. Specifically, they students wrote:

> **…** *this could be a limitation to our project. However, through drawing, there are more variation and we are also able to illustrate the idea in an artistic way.*

Such an understanding of their strengths and weaknesses explains their choices of tools used in their work. They demonstrated in the following reflection a sound understanding of angles used in the drawing which formed successful acquisition of multimodal literacy in new media writing (Ohler, 2013).

> *Moreover, we tried to add more variety with the drawings. For instance, you can see that different angles have been used in drawing. For the final reveal of Sandra's identity, we zoomed in to Sandra eyes and slowly transit them into the dog's. We planned this transition as we want to make it smooth. In addition, this also better brings out the whole theme of the story as the dog is part of the family that should not be given up.*

The students were also confident of their plot development and explained in detail their creative thinking process.

> *We have been paving the major plot twist at the beginning. We provided some of the hints about the character's true identity but not too obvious to give the answers right away. …The major plot twist is the final reveal. The idea of Sandra 'posing' as a human being was not about misleading the audience.*

When discussing limitation of their use of still images, the students explained how they tried to add a more detailed narration and dialogues to make their story interesting. While adopting peer comments in their editing of sounds and dialogues, Janet and Peter were encouraged by the peer's positive feedback on the plot:

> *The peer comments have suggested we should add a variety of sounds and we re-recorded some of the dialogues to better illustrate the character's personality. They also indicated that the titles of the storyboard are a bit ambiguous and we have made it theme-oriented to improve it.*

> *We are happy to know that they find the flow of the story smooth as we have put in effort to build the climax (Sandra having great time with the family) and the anti-climax (the family grew tired of Sandra).*

As indicated in this case study, collaborative learning can be successful when peer commentators are interdependent and able to give constructive comments and appreciate the efforts of their peer's work (Johnson and Johnson, 2009). The students were also given an option to choose their own peer commentator.

artifact 1

artifact 2

Figure 2. Storyboards for write brain exercise 3 (artifact1) by Janet and digital storytelling project (artifact 2) by Janet and Peter

Case Study 2: Digital Expertise of Emily and Natalie

Emily and Natalie are very familiar with video editing while they were less confident with hand-drawing. This can be found in their choice of using mainly digital tools for preparing both storyboards. Successful collaborative learning is also noted in the students' ability to delegate and adopt different ideas:

> *… throughout the project, we have good teamwork. We had a clear delegation of work, e.g. Emily was responsible for directing the film and doing video-editing, and Natalie was responsible for the acting and script-writing. Also, we listened to each other's opinion. At first, Emily wanted to work on local culture like the diminishing traditional culture, while Natalie wanted to work on "loser". After we listened to each other's opinion, we came up [with] a story that addresses both themes.*

Given their high level of digital literacy, the students were confident of their planning and application of digital technologies:

> *First, we successfully conveyed the same message under limited resources, such as the lacking of kid actors and a 'real' office. We think it was quite clever to show their sound only and film the scenes from specific angles.*
>
> *Second, the shooting process was well-organized, smooth and efficient. We listed out all the scenes and then divided them into groups according to the settings. Also, as our male actor had to arrive later, we arranged filming all his scenes at last.*

Being digital natives, the students' self-reflections indicated their ability to comprehend what was represented and the internal logics and encoding schemes of that representation (Lotherington and Jenson, 2011). They were aware of the technical challenges and able to seek solutions in resolving such problems:

> *Since some of the settings were noisy, we needed to record the dialogue separately and match it with the video. Although it makes the sounds clearer, it could be a bit unnatural to watch. Therefore, we might choose some quieter places to film next time.*

As learners of creative writing, the students reflected critically on their character development through use of dialogue:

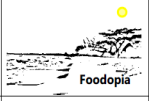
> *We think some of the scenes are not intense enough because the protagonist felt a bit too shy to act dramatically in the public, such as scolding at the editor in the second interview scene.*

One way of demonstrating critical thinking is the ability to evaluate and assimilate feedback (Boud and Molloy, 2013). The students demonstrated such an ability from their use of peer feedback:

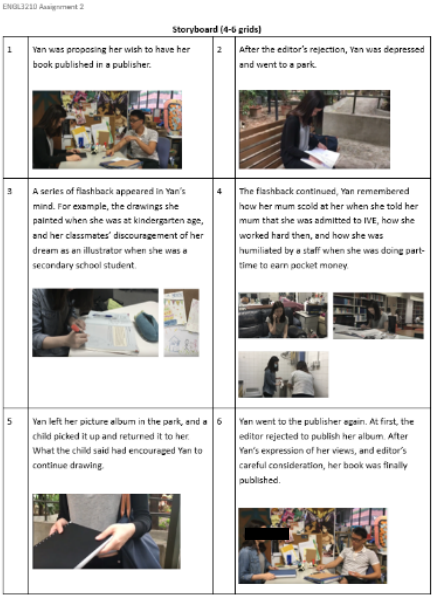
> We agreed (with the commentators) that the theme is meaningful with a good use of camera angles and soundtracks. We reckoned the use of different fade in and out can make the transition better. However, we think two soundtracks within the story would be enough, because each of them addressed different developments in the story, in which the first soundtrack addressed the flashback, while the second one addressed the turning point.

artifact 3

Storyboard

No.	Sketch	Description	No.	Sketch	Description:
1		Weather Shot: The sunset view in Foodopia; Words "Foodopia" appears at the bottom right hand corner of the image	2		Point-of-view Shot: The image of crop failure in Foodopia, the audiences seem to walk through the crops
3		Transition: L cut Audiences will hear the sound of the crowd a few seconds before they see the crowd Close-up Shot (slow motion): People in Foodopia are suffering in famine and fighting for food	4		Wide Shot (Two-shot): Jack and Alan (citizens in Foodopia) are sitting away from the crowd, discussing on how lonely and hopeless Foodopia is because of its poverty
5		Transition: Scene No.4 fades out, No.5 fades in Medium Shot: Images shift from Foodopia to Pizza Planet	6		Close-up Shot: Millions of people protest against food waste, they advocate sharing of food to poor country like Foodopia
7		Medium Shot: Pizza Planet's Government decided to donate some food to Foodopia	8		Close-up Shot: Due to the more even distribution of the food, citizens in both Foodopia and Pizza Planet become happy. Finally zoom in the smiling face of Jack and Alan.

artifact 4



ENGL3210 Assignment 2

Storyboard (4-6 grids)

1	Yan was proposing her wish to have her book published in a publisher.	2	After the editor's rejection, Yan was depressed and went to a park.
3	A series of flashback appeared in Yan's mind. For example, the drawings she painted when she was at kindergarten age, and her classmates' discouragement of her dream as an illustrator when she was a secondary school student.	4	The flashback continued, Yan remembered how her mum scold at her when she told her mum that she was admitted to IVE, how she worked hard then, and how she was humiliated by a staff when she was doing part-time to earn pocket money.
5	Yan left her picture album in the park, and a child picked it up and returned it to her. What the child said had encouraged Yan to continue drawing.	6	Yan went to the publisher again. At first, the editor rejected to publish her album. After Yan's expression of her views, and editor's careful consideration, her book was finally published.

Figure 3. Storyboards for write brain exercise 3 (artifact 3) by Emily and digital storytelling project (artifact 4) completed by Emily and Natalie

Case Study 3: "Pierre" by Sally

Sally is more confident of her writing skills than hand drawing and using digital tools. She further developed the plot of her digital story project using the same topic on food sharing during famine from write brain exercise 3. It is Sally's dream to produce a film ultimately on the theme of a young Holocaust survivor during the second world war. Given the complexity of the story and its background, Sally decided to prepare written scripts of a major scene for her project instead of shooting a video. Researching into the setting of her story, Sally explained in her self-reflection how she had adapted and recreated the Caritas story using various sources:

> *With the themes of family, survival and the Holocaust, I created the plot of "Pierre" with influences from The Book Thief by Markus Zusak and The Diary of a Young Girl by Anne Frank. I then recreated the plot into a screenplay through influences from The Pianist, a film directed by Roman Polanski.*

By focusing on traditional storytelling techniques in adding dialogues in the narrative, Sally drafted lines for her characters with an awareness of pacing the speech using sound and images. On her draft, Sally received comments from a peer who took the course and a friend who was not from the class. The peer wrote:

> *Your screenplay has very detail[ed] description on the setting and the action they did, and as I could only see a scene, I could not understand the whole story, I would suggest that to write more scenes or to provide more background information of the story to make the reader easier to follow. On the other hand, it may [be] possible to add the time that the speech start[s] and how long would it last for to let the actors to have a better time management.*
>
> *I think the typesetting of the screenplay have to be modified for increasing the readability.*

The peer mentioned the need for actors to see the timeslots and appropriate use of typesetting in a screenplay. It indicates how the student commentator was aware of the format as well as the target reader. Peer review in this case is useful for development of creative writing skills.

While the project in this case was an individual attempt, collaborative learning was still possible through online peer reviews not just by a classmate but also a friend on Facebook. The comments from the friend could relieve some worries Sally may have on the accuracy of facts about an era she could only experience through history.

> *You said you were worried about the accuracy of the events – I think it is realistic based on the context and based on what I have read from other books. Based on the scene it lets me wonder how come Karolin did not know about Franz's brother? Is Karolin and Franz's marriage not doing good?*

To these comments, Sally responded:

> *Research into the accuracy of events was the toughest part about writing this plot as another audience to my film would be the general public in which academia studying the Holocaust,*

> *Holocaust Research Centers and other individuals specializing on the topic could retain an awareness to the events – therefore, accuracy is of great importance.*

Her peer reviewer also gave the following comments on her work and use of soundtrack:

> *I liked the screenplay and think the storyboard goes together with the story – good choice of film shooting shots. The soundtrack of John Williams is good for that scene but maybe you can tell us which part of the song you'll include or will you include the whole song? Also maybe at the end, some music can be added to show the end of the scene.*

It can be noted also from Sally's response below that she understood *audio* is an important element of film production. To her use of only one soundtrack, Sally explained:

> *…to suit the needs of general film viewers so elements of audio [are] crucial to be included – however, only one soundtrack is used in the above scene as I chose to focus on the dialogue of the characters instead.*

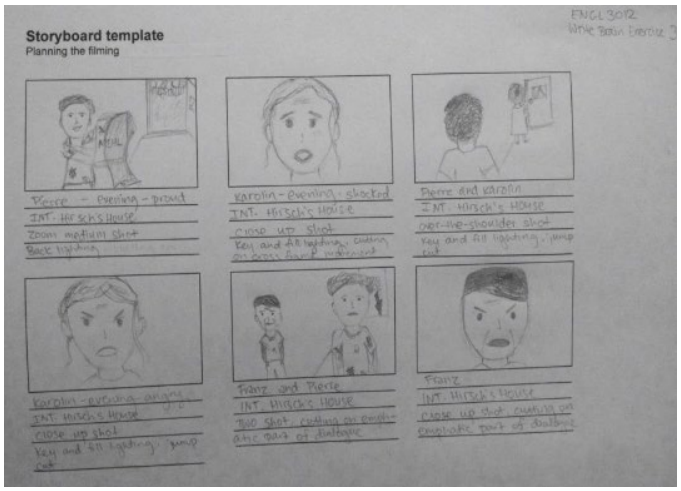
While making a film out of screenplay takes much efforts and time, Sally ended her reflection with a practical plan:

> *To further work on this script, it would've been nice to have a test shoot to see whether specific dialogue or actions could be further improved to create the emotion of desperateness from Pierre and hesitancy from Karolin.*

In terms of the movement of camera angles, Sally has used wide angle and top view for a general picture of the setting. In order to reveal details of the face and hand close-ups (see artefact 6 in Figure 4) were used. Shadow is also added to create visual effects of darkness and gloom. In designing the setting of her story, Sally has been careful with the transition between interior and exterior shots by marking story grids with "INT" and "EXT" on her storyboard.

Comparing the storyboard (artefact 5) Sally made for write brain exercise 3 with the one she created for the digital story project, improvements of storytelling techniques can be noted. In addition to her awareness of camera angles and pace of narrative, the hand-drawings also seemed to have refined with adding of details and perspective in her image design.

artifact 5



artifact 6

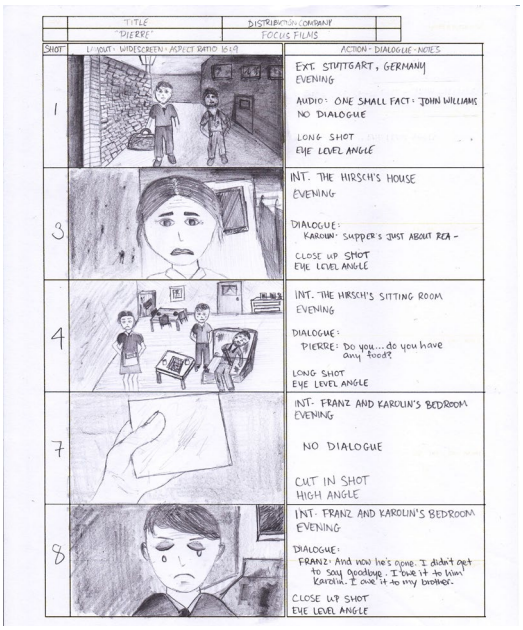


Figure 4. Storyboards for write brain exercise 3 (artifact 5) and storytelling project (artifact 6) by Sally

As noted in their completed digital story projects, the students have all successfully created digital or digitalized work (Figure. 5) using both keyboard and pen (Faranosi, Lim and Roll, 2016). By giving students autonomy to pace their acquisition of digital literacy and creating opportunities to develop creative writing skills through peer collaboration, the learning process can be fruitful and encouraging.

artifact 7. "To adopt, to adore"

artifact 8. "Loser's Dream"

artifact 9. "Pierre"

Figure 5. Screen captures of digital stories shared online by the students

Implication and Conclusion

In her paper on writing (1977), Janet Emig described writing as a mode of learning and a unique language process which requires careful thinking and results in a visible graphic product. She regarded writing as a "technological device-not the wheel, but early enough to qualify as primary technology" while "talking is organic, natural, earlier" (ibid:124). Digital storytelling requires a combination of writing and talking with components of researching, storyboarding, scripting and making of audio and video demands a set of multiple and multidisciplinary skills sets. It can be challenging therefore for both the teacher and learners. The pedagogical design should consider how to accommodate differences in level of digital proficiency and offer options and opportunities for students to make good use of their strengths and talents.

Effective creative writing training also need to respect students' preferences to work independently or collaboratively by designing tasks which requires individual efforts as wells as team work. When peer and self-assessments can be useful to train editing and evaluative skills, teachers need to be aware of differences in students' level of proficiency. Although learning technologies can reduce possible bias and peer pressure by allowing anonymity, self-arranged peer review and face-to-face discussion can motivate learning and conducive in development of skills.

Lastly, a blended learning model is not confined to the physical setting and adoption of learning tools, it can also be practiced in a combined use of keyboard and pen, screen and paper as illustrated in the three case studies. Through a balanced training of traditional storytelling techniques including storyboarding, scripting and use of visual and audio effects aided by basic practice of digital editing software, quality digital contents can be well-developed.

(total 7770 words)

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Appendix I Assignment Guidelines to Write Brain Exercises

Write Brain Exercise 1

Create a One Minute Audio Autobiography

- Compose a ONE-minute (min) audio clip that explores the role of sound in your own life and record sounds around you, including your own thoughts and voice.
- This exercise should not simply record and reproduce sounds. Rather, it should use sound to tell a story, make meaning about, create some commentary on, offer some insight into your living and daily encounters with others (animals and aliens count too ☺). More importantly, it should help listeners reflect on what they are hearing.

Write Brain Exercise 2

Create a One Minute Video Autobiography

- Compose a ONE-minute audio-visual text using the ideas and sound clip you have formed in Exercise 1.
- Combine any of the following to revise the sound clip and compose a new clip: e.g. still images, animation, sketches, video, music, written words, narration, and/or sound.
- Include a title screen for your AV clip and a credit screen with full citation for video clips, images, music etc. that you download and use.
- For this exercise, you will need to do one or more of the following tasks:

1. Record at least a 10 second video (must be original clip)
2. Use some digitized images (credits needed if they are not yours)
3. Include music, and sound/narration/voice over, which means some editing of the sound clip you did for Exercise 1 is necessary.
4. Add text (e.g. subtitles, captions, credit listing) to clarify your message

Write Brain Exercise 3

Create a One Page Storyboard and Draft Scripts

Watch the video story of "One Human Family, Food for All" (https://youtu.be/qhU5JEd-XRo) by Caritas. Use the plot to recreate your own version of the story. Prepare a story board and draft scripts for a one-minute scene in digital format. You need to:

1. Describe the synopsis/ "blurb" to introduce your story.
2. Include a storyboard (1 page A4) and scripts (one-minute of a major scene).

Appendix II Sample Rubrics of Write Brain Exercise 3 for Peer Review and Teacher Assessment

Write Brain Exercise 3: Storyboard (10%) and Script (10%)

1 Little evidence of careful planning, composing, producing graphical plot and written scripts **Comment:**	2	3	4	5 Lots of careful planning, composing, producing graphical plot and written scripts
1 little structure and hard to follow the narrative **Comment:**	2	3	4	5 Clear structure and easy to follow the narrative
1 No or little original ideas **Comment:**	2	3	4	5 Many original ideas and well developed
1 No or inappropriate plan for audio and visual elements **Comment:**	2	3	4	5 Appropriate plan of audio and visual elements
1 No thoughts on audience' needs **Comment:**	2	3	4	5 Awareness of audience needs
1 Less creative and insightful use of linguistic device **Comment:**	2	3	4	5 Very creative and insightful use of linguistic device
1 Less than careful approach to citation, documentation, copyright, licensing **Comment:**	2	3	4	5 Very careful approach

Appendix III Assignment Guidelines on the Digital Storytelling Project

"Let's Tell a Story!"
You are invited to produce a story by employing your senses and ideas. The content and format of the story is entirely of your own decision and making. In this story, you need to record, organize, create and present a short story to a target audience of your choice. You need to specify your target audience and other relevant ideas either on the storyboard or in your self-review of the first draft. The story can be incidents or happenings from your daily life or of concepts and imagination or a mixture of both. Remember to attribute to sources of information and give credits to any form of quotation used in your work.

As a potential target audience and fellow story teller, you are required to conduct at least ONE peer review of another project. Comment on your experience as an audience and if there are things you would suggest the author change. Be very specific and concrete when you comment on both the work of others and respond to feedback you will receive on your own project.

The Task (individual attempt or group work in two and three)

a. Storyboard
(1 A4 page, 5%)
Week 9 Submit a storyboard of the main plot to the teacher before project consultation. The task assesses both *originality* and *creativity.*

b. Self/Group-Review, Peer Comment and Final Reflections
(total three comments in about 900 words, 15%)

Week 11 First draft will not be assessed but need to be reviewed by a peer. It can be in the format of written scripts and semi-edited audio-visual clip. You need to conduct a self-review using the rubrics provided and write in 300 words to explain your creative process.
Week 12 Conduct a face-to face peer review of first draft will be conducted in class. Write your comments in 300 words as a critique using the rubrics.
Week 13 Write another 300-word reflection on the project and respond to peer comments received.
Please submit all your comments in the given template for teachers' assessment.

c. Digital Story
(Max 10 A4 pages or 3 minutes in digital format, 20%)
Publish your digital story online in a digital or digitalized format. You can choose appropriate online platforms or social media for sharing you're your target audience.
Please submit on Blackboard the URL to your digital story and written scripts with clear instructions for screen production.

Appendix IV Assessment Rubrics of Digital Storytelling Project

Storyboard and Digital Story (25%)

Category/ indicative grade	**F, D to D+**	**C to C+**	**B to B+**	**A to A+**
Creativity	DIFFICULT to figure out the plot of the story because of LITTLE interesting ideas.	The plot is SOMEWHAT clear but many aspects of the story seem only SLIGHTLY related. Ideas are NOT attractive or specific enough.	The story CLEARLY establishes a plot, but SOMETIMES wanders from that focus and lacks attractiveness.	The Story DISTINCTIVELY establishes a plot and appealing to the audience and ALWAYS maintaining a focus.
Coherence	Information is NOT organized and audience have BIG trouble following.	Information is SOMEWHAT organized, and audience have SOME trouble following.	Information is MOSTLY organized and audience have LITTLE trouble following.	Information is SMOOTHLY organized with a FOCUS and FLOW that audience have NO trouble following.
Originality	Uses other people's ideas, but does NOT give them credit.	Uses other people's ideas (giving them credit), but there is LITTLE evidence of original thinking.	SOME original thoughts with credits to other people's ideas.	Shows a GREAT amount of original thought with MUCH insight.
Audience Awareness e.g. audio/ visual effect, caption, subtitle, etc.	LIMITED attention to audience in designing the story.	SOME attention to audience	GOOD attention to audience	EXCELLENT attention to audience
Delivery of Message Verbal or Written Text	Does NOT present clearly the main plot	SOMETIMES clear	MOSTLY clearly	ALWAYS clear
Script Instruction	text with NO instructions and contains **more than 10** errors.	VAGUE instructions with **6 to 10** errors in the script.	CLEAR instructions but **2 to 5** errors in the script**.**	CLEAR instructions but **2 to NO** errors in the script.
Script Layout	Inappropriate format and layout.	Format and layout are SOMEWHAT appropriate.	Format and layout are MOSTLY appropriate.	Format and layout are HIGHLY appropriate.

Peer Review and Self-Reflection (15%)

Category/ indicative grade	**F, D to D+**	**C to C+**	**B to B+**	**A to A+**
Application	Comments do not reflect understanding of the text and irrelevant from the learning expected and NOT helpful.	Comments SOMEWHAT indicate SOME related. ideas relevant to the learning but NOT specific enough to help the peer improve.	Comments CLEARLY indicate SOUND understanding of the story and relevant to the learning, but SOMETIMES not very relevant or misleads the peer.	Comments DISTINCTIVELY indicate In-Depth knowledge of the learning and ALWAYS offer useful suggestions which are relevant and specific for the peer to improve.
Argument	Ideas are NOT organized and reviewee has BIG trouble following.	Ideas are SOMEWHAT organized, but reviewee has SOME trouble following.	Ideas are MOSTLY organized and the reviewee has LITTLE trouble following.	Ideas are CONCRETE organized with a logical argument that the reviewee has NO trouble following.
Reflective Learning	Both peer and self-reviews are showing surface learning with use of jargon only	Both peer and self-reviews are showing SOME depth of learning on creative writing and use of the new media	IN depth understanding but little original thoughts	Profound understanding and insightful thoughts