Spark Video Strikes Back: Reigniting Learning and Practice in Presentations in a PowerPoint Dominated Universe

Peter Lane, Asia University

Abstract

This research project aimed to explore the use of Spark Video to promote student learning and skill development. This paper argues that in the language classroom, presentations are much more valuable for students as a learning tool rather than as assessment tool. More specifically, this paper looks at the impact of creating online presentations using Spark Video on students' English language skills, students' presentations skills, and finally examines other learning benefits of using Spark Video as an alternative to more traditional PowerPoint presentations. According to the findings, creating Spark Video presentations improved students' language skills, presentation skills, and understanding of the course content. Students also enjoyed creating presentations and watching other students' videos. However, issues with the design of the project, the amount of class time available, and external work pressures resulted in some classes being more positive about the application than others. Suggestions and recommendations are made to address these issues and to help advice any educators who wish to use Spark Video as a learning tool in their classrooms.

Introduction

One of the most commonly used methods of assessment in university English classes are presentations. Teachers want students to demonstrate their understanding of the course content or to demonstrate their language skills at the end of the semester. Teachers also believe presentations are a good way for students to share their learning with the others so that every student in the class is learning something during the presentations. Presentations often make up the triad of common student assessment methods, the others being an essay or report and a test or exam. When you ask most teachers how they are planning to assess students at the end of the current semester, they will usually choose one or a combination of these methods. These are the assessment tools every teacher learns about during their teacher training. However, there are several issues with using presentations to assess student learning in university classes. They can require a lot of time for each student to present and to receive immediate feedback from their peers and from the teacher. Some teachers will ask students to work in groups when giving presentations to save time (more for practical than pedagogical reasons), but all too often some students end up doing most of the work while others do very little. In addition, students usually only have one chance to showcase their learning, which can be very stressful or intimidating. Can you imagine only having one chance to learn and cook a good custard or risotto in front of others? As for their peers, students may struggle to listen to dozens of presentations over several classes and succumb to presentation fatigue. A final issue relates to the ubiquity of PowerPoint. Walk into any class where students are giving presentations and most of them will be using PowerPoint. Even for teachers, PowerPoint is usually the tool of choice. But should it be? Is PowerPoint always the right tool for the job? Do students choose PowerPoint because it helps their audience to learn more or because it is the only tool they have been shown to use? Does PowerPoint encourage students to expand their thinking or to reduce their ideas and creativity? Frommer (2012).

These issues, how traditional presentations are given and assessed both in my own classroom and in the classrooms of other teachers, led me to ask: Is there a better way of doing things? Is there a better way for students to develop their language and presentation skills while connecting with the content, with the teacher, and with each other? This research paper explores using animated videos as a way for students to develop their language skills and create quality

presentations to showcase their learning. The application Adobe Spark Video was chosen to try to maximize student learning by giving students more time and opportunities to learn, to practice, to create and to share. Instead of giving one traditional presentation at the end of a semester, students would create several animated videos or online presentations during the semester, and so, it was hoped, learn more and learn better. Specifically, this research paper seeks to answer the following three questions:

1. What impact does using Adobe Spark Video have on students' English language skills?
2. What impact does using Adobe Spark Video have on students' presentation skills?
3. What learning benefits does Adobe Spark Video have over more traditional PowerPoint presentations?

After providing a review of relevant literature, this research paper will explain the context and the data methods used, discuss the findings and implications of the research, and finally offer suggestions and recommendations for future use.

Literature Review

What Is Wrong With Traditional Presentations?

On their own, there is nothing inherently wrong with traditional presentations, just as there is nothing inherently wrong with exams. In-class presentations provide students with valuable experiences organizing and developing their ideas and presenting those ideas in front of an audience. Learning how to explain and communicate your ideas clearly to others is a key skill in the 21st century (OECD, 2010). However, as Nilson (2010) points out, in educational environments as a learning and/or assessment approach, traditional presentations have six main weaknesses or potential problems:

1. Traditional presentations are usually time consuming. Presentations can be time consuming for students to create and time consuming for teachers to observe.
2. Opportunities to practice language or skills are limited; students usually only give one presentation during or at the end of a semester. 'Learning by doing something once' is not a very effective learning approach.

3. With group presentations, skills development can become compartmentalized; one student writes while another student presents. Group presentations can also lead to social loafing (Santrock, 2011) where one person exerts less effort and hides behind the work of others.
4. Students who have not yet given a presentation are often more focused on giving their own future presentation rather than paying attention to the presentations of their peers.
5. Traditional presentations can suffer from a lack of interaction. Due to a lack of available time, the audience may only have a few minutes to ask questions or discuss the ideas. As Laurillard (2002) pointed out about the use of technology in universities, asking students to watch a video is not 21st century learning; what you ask students to do after watching the video is when the learning takes place. Likewise with presentations, the time after a presentation can be where ideas are discussed, skills are practiced, and understanding reached (Race & Pickfort, 2007).
6. Traditional presentations can lead to superficial rather than deep learning. When students only give one presentation per semester, they may feel it safer and easier to memorize all of the content rather than explaining their ideas naturally during the presentation, resulting in presentations which sound monotonous or artificial. 21st century learning should be about promoting deep and long-lasting learning rather than simply memorizing information (OECD, 2010; Brown et al, 2014).

While teachers can adapt traditional presentations to enhance learning (by requiring all students to present, write or give feedback), issues such as time constraints, a lack of practice or learning opportunities remain problematic in university settings. Given their dominance, are presentations always the best way to promote or assess student learning in every classroom every semester?

What Is Wrong with PowerPoint?

With over 30 million PowerPoint presentations given every day (Frommer, 2012), PowerPoint has become the single most ubiquitous tool for presenting ideas and it is generally the most popular way of giving lectures or presentations for most faculty and students in universities (Young, 2004; Mann & Robinson, 2009). However, has its popularity become a problem for learning? Recent newspapers highlight the concern with headlines with such as

‘How PowerPoint is Killing Critical Thought’, ‘When PowerPoint is Pointless’, ‘Let’s ban PowerPoint in lectures – it makes students more stupid and professors more boring’ (Smith, 2015; Levy, 2017; Sorosen, 2017). As with traditional presentations, there are several concerns surrounding the dominance of PowerPoint in educational settings:

1. PowerPoint presentations have become overused in classrooms, which can lead to a lack of engagement from the presenters and from the audience.
2. Listening to a PowerPoint presentation is a passive learning experience.
3. Students become overly dependent on the PowerPoint; it become less of a scaffold and more like a crutch. Students’ presentations skills are held back rather than developed.
4. PowerPoint presentations can be text heavy. Many students end up ‘reading’ their slides rather than explaining their ideas.
5. PowerPoint presentations can be very time consuming for students to create. Students can spend more time creating their PowerPoint rather than learning about the content or practicing their presentation skills.
6. While PowerPoints can be customized and enhanced, the program lacks creativity. The layout of standard PowerPoints which includes bullet points on slides can encourage formulaic and generic presentations rather than engaging or creative ones.
7. Because PowerPoint is often the default choice of most students, they are not pushed to explore other ways to present their ideas.

Given the issues with both traditional presentations and with the monopoly of PowerPoint, this research project examined the use of animated videos to develop students’ language and presentations skills. Using animated videos in this way does not seek to replace traditional presentations or PowerPoint, but rather to explore alternative ways to enhance students learning and skills.

What Are Animated Videos?

Most people might think of cartoons or movies when they hear the term ‘animated videos’. However, in most educational settings animated videos are usually short videos containing a slideshow of images and icons along with a recorded narration and music. They are also sometimes known as ‘explainer’ videos since the purpose of the video is to explain

something to the audience, and with the popularity of video hosting sites such as YouTube or Vimeo, animated videos have become very popular for explaining ideas, calling for action, or promoting a product.

Figure 1.1: Examples of student created Spark Videos using icons (left) and images (right)

There are several advantages of animated videos in the classroom. First, images are more engaging for students than only text (Mayer, 2009). Students connect with the content more easily when it is presented in visual ways. Second, animated videos are generally short (3-5 minutes long). It is easier for students to process information in small bite-sized chunks (Ambrose et al, 2010). This is especially important for millennial students who are active users of digital and social media. Third, animated videos save valuable class time (Smith & Budhai, 2015). Students do not have to sit through many presentations in class; instead they can share and watch their videos outside of the classroom on their smartphones, tablets, or laptops. In addition, they can post questions or comments online, which promotes interaction and deeper understanding. Fourth, students can rewatch the content as many times as they wish. Whereas a presentation is usually only given once, students can rewatch an animated video if they do not understand something (Bell & Bull, 2010). Finally, one of the greatest benefits of animated videos is that students can create something. Creating something (whether it is an essay, an object, or a video) helps students to organize their ideas and deepen their understanding (Brown et al, 2014; Patton, 2012). The real power of 21st century learning is unleashed when teachers give the students the tools to create or do something; the act of creation can be one of the strongest drivers of student learning (Prensky, 2016). Furthermore, when students create something they also feel more ownership over what they have made and so they are more motivated to succeed and learn more (Ryan & Deci, 2000).

Why Adobe Spark Video?

Students can use many applications and websites to create animated videos such as iMovie, Camtasia, YouTube, SlideShare, Adobe CS6, Videoscribe, PowToon, etc. While all these applications have great potential to allow students to create engaging animated content, they suffer from one major flaw: ease of use (Lane & Son, 2016). The applications can take time to learn and time to teach, which distracts from the real learning (language learning). Students can spend more time learning how to use the program than learning how to use English. This high learning curve also means many students become frustrated and either give up or do not enjoy the process. By the time students learn how to use the program, the course might be almost over. This is not a problem for teachers who design a course specially aimed at teaching students how to use an application or how to design digital content. But for most teachers who teach languages, the aim of the course must be learning language and developing students' language skills. Focusing on the technology rather than the learning has been a common criticism of integrating technology in classrooms in the 21st century (Laurillard, 2002; Ertmer & Ottenbreit-Leftwich, 2010).

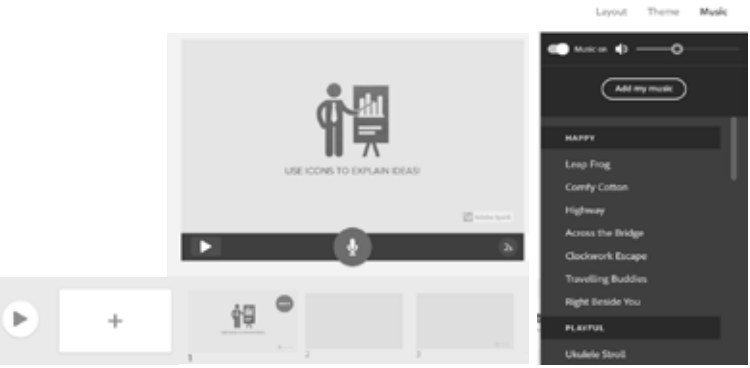

Figure 1.2: Screenshot of the main interface of Spark Video

For creating animated videos, Adobe Spark Video is different because it is very easy to use. The interface is very simple and intuitive. To create an animated video, students push a plus button which allows them to add images, icons, or text to their slides. Students can choose from a wide

selection of in app icons/images or upload an image from the device. The most nerve-wracking part of the process for students, adding their voice, is achieved by simply pressing a big record button, which then records the student's voice over the image or icon. Students can do this slide by slide, without having to record or recite large amounts of text.

One of the big decisions the designers made when creating the app was to put limits on what students could or could not control. For example, students have a limited number of themes they can use. In addition, they have no control over the animated effects each theme utilizes (in other words, they do not choose animated effects for every slide they create). Likewise, there are a limited number of in-app songs students can add to their video. There are also limits on how much text can be included and how that text is arranged on the slides. While taking away choice may seem like it would reduce learning, having too much choice can paralyze action and decision making (Schwartz, 2009). In addition, limiting students' creative control over the video may in fact increase instead of decrease creativity. As Kaufman & Beghetto (2009) state, there is a real problem with 'thinking outside the box' because in reality people need to think creatively inside many boxes. In other words, constraints can not only help us focus on what is important, but they can also free up cognitive processing power and help us to make connections. Sometimes 'less' really is 'more' creative and doing so also gives students more time to focus on the quality of their content and the quality of their learning. The ease of use of the app simplifies every task involved in making an animated video. It is easier for students to create their own professional looking content and to present and share their ideas with others.

A second key feature of the app was the ability to let students easily record their voice. Instead of teacher-centered classrooms where the teacher's voice is the only voice heard, student-centered learning should encourage students to find and develop their own voice, to help students share something meaningful with the people they care about, and to empower them to take more control of their own learning and of their own lives (OECD, 2010). By making it so easy to add narration to their videos, the app helps place student voice and agency at the heart of teaching and learning.

Third, as with the other applications, Adobe Spark Video is a highly visual tool which focuses mainly on images or icons. Text can be included but the limits help students focus on the visual aspects of the content. This visual dynamic promotes deeper learning and creativity because students must visualize how they are going to represent their main ideas. By

encouraging students to visualize and to think more about their ideas, more connections are made between the ideas or words and the images or icons, which promotes deeper and more meaningful language learning (Mayer, 2009; Brown et al, 2014; Bell & Bull, 2010; Oakley, 2014). Again, because this process is simple to do using the app, the students have more time to spend thinking, creating, and hence learning.

Finally, Adobe Spark Video is less time consuming than other presentation or video applications so it allows more time for students to practice and develop their skills. Instead of spending a lot of time learning how to use an application for one presentation, students can use that time to create several animated videos during the semester. Also, the teacher does not have to dedicate valuable class time to watching too many presentations in class.

The Study

This research project aimed to use Adobe Spark Video as an alternative to more traditional PowerPoint presentations to improve students' language skills and their understanding of the course content. It also sought to explore if there were any other benefits or disadvantages to using Adobe Spark Video as an approach to learning and assessment in Japanese university classrooms.

The Participants

During one semester, Adobe Spark Video was integrated into two Freshman English university classes. The Freshman English classes were 45 minutes long and took place 4 times a week. The students were non English majors studying law and urban innovation.

Data Methods and Results

The research project used a mixture of quantitative and qualitative research methods. An online survey was created on Google Forms and given at the beginning and at the end of the course. An online survey was chosen in the hope that it would be easier to complete and increase the response rate (Cohen et al, 2007). When analyzing the data, a positive/negative score was calculated by assigning points to the Likert responses and subtracting the negative response

scores from the positive response scores to try and see students' overall perceptions, and to track any changes in significant shifts in these perceptions (PN1 scores refer to comparative questions given at the beginning and at the end of the semester while PN2 scores only relate to questions asked at the end of the semester). Finally, the top two scores and the bottom two scores were added together to show the differences in students' opinions (TB). As well as the Likert questions, open-ended questions were included in the last section of the survey to elicit more detailed information, and a thematic analysis was carried out on these responses to highlight the key ideas and findings (Cohen et al, 2007). Apart from the online survey, classroom observations, students' written scripts, and students' presentations helped build an understanding of the obtained results. A simple rubric for the online presentations was designed to help maintain grading consistency. One issue of the data to note is the difference in response rate between the pre-course and post-course surveys. The initial response rate was very high (82%), but the end of course survey was much lower (29%). Given the difference in the response rate, care should be taken when interpreting and drawing conclusions from this data. However, as researchers we work with the data we have and not the data we wish we had (Cohen, 2007). The responses collected from this research project were used to try to answer and better understand the following three questions:

1. What impact does using Adobe Spark Video have on students' language skills?
2. What impact does using Adobe Spark Video have on students' presentation skills?
3. What learning benefits does Adobe Spark Video have over more traditional PowerPoint Presentations?

Results 1: Spark Video and Students' Language Skills?

One of the main pedagogical justifications for using presentations in the language classroom is to improve students' English language skills. According to the survey data, there were positive impacts of using online presentations on students' speaking skills, writing skills, and communication skills.

Skills	**1**	**2**	**3**	**4**	**5**	**P/N1**
How good are your English speaking skills at the moment?	6.4	12.9	22.6	48.4	9.7	-49/26
	18.2	45.5	27.3	9.1	0	+75
How good are your English writing skills at the moment?	6.5	9.7	48.4	22.6	12.9	-26/22
	18.2	27.3	54.5	0	0	+48

How good are your communication skills at the moment?	3.2	19.4	38.7	25.9	12.9	-23/37	
	45.5	27.3	27.3	0	0	+60	
I am good at expressing myself through writing in English.	6.5	29	48.4	3.2	12.9	22/45	
	45.5	45.5	9.1	0	0	+23	
Online Presentations/Spark Video	**1**	**2**	**3**	**4**	**5**	**TB**	**P/N2**
Creating online presentations improved my pronunciation.	27.3	54.5	18.2	0	0	81.8	39/0
						0	P:39
Creating online presentations improved my writing skills.	9.1	63.6	27.3	0	0	72.7	33/0
						0	P:33

Figure 2.1: Some of the main results of the data analysis for students' language skills

For the first year English classes, the greatest gains were observed in students' general perceptions of their writing skills (PN1+48; PN1+84), and of their communication skills (PN1+60; PN1+71). Students felt their ability to express themselves through writing improved (PN1+23; PN1+60). Students also reported improvements in their speaking skills (PN1+75), and they felt creating online presentations helped to improve their pronunciation (TB82%/PN2+39; TB55.5/PN2+29) and to improve their general English skills (TB82%/44.5%). The first-year students thought creating Spark Videos improved their writing skills (TB72%/PN2+33). Interestingly, all of the students agreed that writing their scripts with other students improved their writing skills (TB100%), but many students still preferred to write their scripts individually rather than with one of their classmates (TB54.5%). The thematic content analysis (see Appendix C) also showed that for the students, creating presentations is a good way to learn, especially to improve their speaking skills (x3), communication skills (x2), and their understanding/learning (x3). Students also felt Spark Video improved their pronunciation skills (x4) and writing skills (x2).

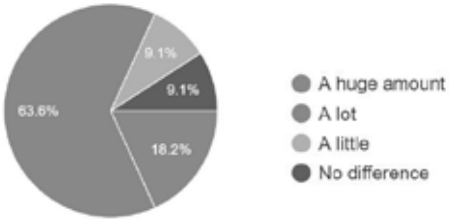

Figure 2.2: 'How much did Spark Video improve your English skills?'

Results 2: Spark Video and Students' Presentation Skills?

Another reason to use student presentations in class is to improve students' presentation skills. According to the data, the students showed significant improvements in their presentation skills during the semester (PN1+73; PN1+68), and the level of enjoyment they experienced from doing presentations increased (PN1+30; PN1+56).

Skills	**1**	**2**	**3**	**4**	**5**	**P/N**	
I am good at giving presentations in English.	6.5	12.9	38.7	12.9	29	-35/38	
	18.2	72.7	0	9.1	0	+73	
I enjoy doing presentations in English.	3.3	30	40	23.3	3.3	8/38	
	54.5	27.3	9.1	9.1	0	+30	
Online Presentations/Spark Video	**1**	**2**	**3**	**4**	**5**	**T/B**	**P/N**
Spark Video is easy to use.	36.6	54.5	9.1	0	0	90.9	44/0
						0	P:44
Creating online presentations improved my presentation skills.	54.5	27.3	9.1	9.1	0	81.8	42/4
						9.1	P:38
Using Spark Video helped me to be creative with creating a presentation.	40	50	10	0	0	90	40/0
						0	P:40
Creating a presentation with SV is easier than creating a presentation with PPT.	63.6	36.4	0	0	0	100	51/0
						0	P:51

Figure 2.3: Some of the main results of the data analysis for students' presentation skills

The data shows the first-year students were positive about the learning benefits of Spark Video on their presentation skills. 82% of first year students agreed that creating online presentations improved their presentation skills (PN2+38). In addition, all the first-year respondents believed creating Spark Videos was easier than creating a presentation with PowerPoint, and most students felt the application was easy to use (TB91/PN2+44). Similarly, 90% of first year students agreed that Spark Video helped them to be creative (+40) when creating an online presentation. The thematic content analysis revealed the three most common creative skills students developed from using Spark Video were creating/thinking (x2) and expressing ideas visually (x2). Finally, 82% of respondents planned to use Spark Video to create online presentations in future classes, and 71% of the written respondents stated Spark Video improved their presentation skills, mostly their communication/presentation skills (x3) or speaking skills

(x2). Overall, the majority of first-year respondents were very positive about the impact of Spark Video on their presentation skills.

Results 3: Learning Benefits of Spark Video?

As previously stated in the literature review, there are many benefits of creating online presentations instead of more traditional PowerPoint presentations such as saving class time, sharing presentations online, or helping students to become competent content creators. However, merely using 21st century learning approaches does not always guarantee that the benefits of such approaches will always be realized. With relation to peer learning and Spark Video specifically, the results from the first-year students were positive, with 81% of first-year students enjoying sharing their spark videos with their classmates. A second benefit of creating online presentations is understanding the course content more. Most students agreed that creating a spark video helped them to understand the content or topic better (TB80/20/PN2+13). Some students also confirmed in the thematic content analysis the importance of understanding the content or learning something new as one of the main benefits of creating online presentations (x2). A final benefit of Spark Video over more traditional PowerPoint presentations is enjoyment. The most liked feature of Spark Video was choosing the photos, icons, or music (x6). Students enjoyed using the app to create their own presentations and most students felt online presentations were better than face-to-face presentations (TB82/9/+38). Most students also preferred creating a Spark Video than giving a PowerPoint presentation (TB91/0/PN2+47).

Online Presentations/Spark Video	**1**	**2**	**3**	**4**	**5**	**T/B**	**P/N**
Creating a Spark Video helped me to understand the content/topic better.	20	60	0	20	0	80	17/4
						20	P:13
I prefer creating a Spark Video than giving a presentation with PowerPoint.	63.6	27.3	9.1	0	0	90.9	47/0
						0	P:47
Spark videos are more enjoyable to watch than PowerPoint presentations.	36.4	36.4	27.3	0	0	72.8	36/0
						0	P:36
I enjoy sharing my learning with other students using Spark Video.	Yes: 81.1	No: 9.1	?: 9.1				

Figure 2.4: Some of the main results of the data analysis for the learning benefits of Spark Video

However, not every process involved in creating a Spark Video was enjoyable for all students, with some students not enjoying recording their voice (x2), encountering technical difficulties during the process (x2), or struggling with writing their scripts (x3). Besides the enjoyment of creating online presentations, more students enjoyed watching Spark Videos over watching PowerPoint presentations (TB73/0/PN2+36).

Overall, Spark Video improved students' English skills, presentation skills, and understanding of the course content. Students were engaged in the creative process of making online presentations as well as watching their classmates' videos. However, not all students enjoyed writing their scripts or recording their voice.

Discussion

Spark Video and English Skills

Findings revealed that Spark Video improved students' English language skills. Traditional presentations are often time consuming and so they are usually used once or twice a semester, often to test or assess students' language skills or content knowledge. Therefore, time on task or learning opportunities can be limited (Smith Budhai & McLoughlin, 2015). In contrast, since Spark Video presentations are quicker and easier to create, students have more opportunities during the semester to practice and to improve their English language skills. This focus on practice and on learning by doing helps to shift the pedagogical focus of presentations from an assessment tool to a learning tool and to better realize the potential of presentations to develop students language skills (Nilson, 2010). The data illustrated that Spark Video helped students develop their pronunciation skills, speak slowly and clearly to an audience, and to develop their confidence when speaking English. Since the online presentations mirrored or followed the grammar and topics students were learning in their textbooks, creating Spark Videos also gave students the opportunity to develop and practice their grammatical knowledge and general language skills when writing their scripts. Furthermore, Spark Video also gave students many learning opportunities to develop their writing skills. For each presentation, students had to write an introduction, topic sentences with explanations, transition words, and a conclusion. Having to do this multiple times gives students the opportunity to practice and develop their writing skills and techniques. It also provides the teacher with multiple

opportunities to give students prompt feedback and so promote deeper learning (OCED, 2010). A big issue with more traditional in-class presentations is that students may only have one chance to write a script during the semester. In addition, if given at the end of a semester, when can students make use of the feedback they receive? Multiple opportunities to write presentation scripts means students can receive more prompt feedback and then use that feedback to improve their future performances.

Writing skills and techniques such as writing engaging introductions or explaining main ideas are important writing skills when creating presentations, writing educational video scripts, or writing essays. Therefore, these writing skills are transferable, and they can be used for different learning activities and in different learning contexts. Given that transferring learning skills in different contexts is a key skill in the 21st century (OECD, 2010), creating online presentations can act as a foundation for students to build and develop these transferable skills. Teaching writing in universities in Japan can be problematic for various reasons, whether it is the differences in language and conventions or the lack of previous writing experiences in secondary schools (Hyland, 2009; OECD, 2012). Expecting students to be able to write competently in English without first helping and supporting them only punishes the students and frustrates the teacher. It is no wonder students expect to fail or lack faith in their writing abilities when they are not given the chance to practice key writing skills, to learn by doing, and to publish and share their work for more than just 'their' teacher. From analyzing the students' scripts and observing them writing together, it was great to see the improvements in their writing skills over time and to witness the positive impact creating online presentations had on their confidence in themselves, on their willingness to learn from each other, and on their enjoyment of learning English. Nonetheless, no approach is ever perfect or without room for improvement. For example, it is interesting to note from the data that students also saw the benefits of writing in pairs and learning from each other, although overall, they still preferred to write individually rather than collaboratively. Since students always wrote most of their scripts together, some students may prefer more opportunities to work by themselves or to have more autonomy when writing their scripts. A more mixed writing approach comprising individual and collaborative writing opportunities may prove more successful in future.

Spark Video and Presentation Skills

Students were able to learn key presentation skills when creating online presentations. For instance, students had opportunities to practice writing scripts, using their voice effectively, using high quality images to engage their audience, and using icons to make their main ideas easier to understand. Although some specific skills were not as easily identified by the students in the data, most students identified selecting images and icons, not only as an enjoyable part of the creation process, but also as an important skill for them to learn. When teaching millennial students, teachers can mistakenly assume that students are proficient at using technology or that they all love using technology for learning or for entertainment. However, labelling all students who grew up using technology as information-savvy millennial students is inaccurate because it is not the case that all students enter university with equal competent technological skills (Kirschner & De Bruyckere, 2017). For example, during the project many students had issues with finding high quality images using Google Images and not using images which had watermarks. In addition, not all students were familiar with sharing, embedding links, downloading videos, etc. Being a regular user of Facebook, Instagram, or Snapchat does not automatically make students technological competent or masters of their devices. While this was an issue in the beginning of the project, the most effective solution, as with writing in English, was to put students into pairs or groups so that they could teach each other how to create and publish online presentations.

As the data suggested, creating Spark Videos helps students learn and develop important presentation skills and techniques. However, it would be foolish to assume students can learn everything from creating online presentations. There are essential presentation skills which online presentations cannot replace such as using gestures, speaking in front of a live audience, maintaining eye contact, etc. However, what Spark Video can do is give students confidence to develop certain key presentation techniques and to present and share their ideas with others. Using Spark Video can help prepare students for giving live or face-to-face presentations in university or in their future career, more like a playground for practice and skill development before entering the arena of presenting in public. Indeed, Spark Video could also be used in an English classroom along with face-to-face presentations so that students can experience the best of both worlds. It is not a replacement for face-to-face presentations but a supplement or addition to them, a learning tool students can use to practice, improve, and find their voice. In addition,

Spark Video helps students to learn how to present in the 21st century. As our lives become increasingly dominated by online activities, students need to learn how to communicate their ideas clearly in engaging ways, one of the four key 21st century skills (Smith & McLoughlin, 2015). Crafting effective introductions and conclusions, explaining main ideas, using high quality images, adding music and themes to make video appear more professional, using voice to engage an audience, communicating in a global language to an online audience, learning from others, understanding the challenges and opportunities of presenting online, these are all skills which Spark Video can potentially teach students.

Spark Video and Other Benefits

One of the biggest benefits of Spark Video for students is the ease of use. From the Likert data and thematic analysis, students were positive about Spark Video being easy to use. Most of the students also enjoyed the process of creating Spark Videos. Having an app which is easy to use and saves time means teachers can provide more learning opportunities to the students during the semester. In contrast, PowerPoint presentations can be time consuming, difficult to create, and are more laptop dependent. While there is an app for PowerPoint on tablets, resizing photos and text using a screen is not a fluid experience. Spark Video is easier to use, and it is also smartphone and iPad friendly. This means students can use their own devices in class or outside of the classroom. Since most students own a smartphone, teachers do not have to drag students to a computer lab or provide every student with an iPad or laptop. This convenience and ease of use makes learning easier and more ubiquitous, which is exactly what 21st century learning is all about. One issue of access regarding Spark Video is that it is presently only available on iPhones or iPads, which meant students with Android phones could not use the application. However, during the project students were either encouraged to use one of the teacher's available iPads or to bring their laptop to class (Spark Video can be accessed online using a web browser). In addition, there is currently an Android beta version available for early use, although the final version may not appear until later in 2018. This is not a fatal weakness of Spark Video, but it did present certain hurdles for some students and may have caused some students to either struggle with creating their online presentations or not create the presentation at all.

Another benefit of Spark Video over more traditional PowerPoints is the visual nature of creating online presentations using the application. Slides on Spark Video are similar to

PowerPoint slides, but they are easier to create and they are highly visual. Students use photographs and icons to support the main ideas in their script. By representing their main ideas visually, students have to think more about these main ideas and words and more thinking equals more learning. Finding photographs and icons is very easy to do since students can use the icons or photographs available within the application or they can download their own photographs (from Google Images or Facebook) to their devices. As mentioned earlier, finding and using photographs and icons was what students liked most about using Spark Video. Being able to find and use photographs and icons easily makes their presentations more personal, meaningful, and so intrinsically motivating (Patton, 2012). It must be stated, however, that some students were reluctant to use photographs of themselves or of their friends or family, possibly because they are shy, embarrassed, or concerned about data privacy. Again, assuming that millennial learners love sharing images and photographs online is a mistake. In the case of this project, some students were reluctant at first to include a photograph of themselves in their presentations, but once they were encouraged to do so, they became less worried and they were much more likely to include images of themselves in later presentations. In addition, if students remained reluctant to use a personal photograph, they always had the easier option of using an icon instead. As with all learning, students can often be apprehensive doing something for the first time, but they grow in confidence and self-esteem when given support and encouragement.

The highly visual nature of Spark Video also has the potential to exercise students' creative skills. By representing ideas or words visually, students must think about these ideas or words in a visual way; they must think about how best to represent ideas both complex and simple in an easy to understand visual format. For example, what image should a student use to represent 'passion', 'loyalty', 'endangered species' or 'climate change'? Because the amount of text students can input on Spark Video is limited, students are instead encouraged to think about how to communicate their ideas visually. Since Spark Video is a highly visual application, it helps move students away from bad PowerPoint habits where too much text can be contained in each slide. In addition, more visual slides makes their online presentations more engaging for their audience, which also promotes more learning for the other students watching.

There are other limits within Spark Video which can promote students' creative skills. There is a limited selection of themes (seven) and a limited selection of in-app music. Both the fonts and the text size are determined automatically by the themes. While giving students limited

control over creating their presentation may seem to be a negative thing at first glance, it promotes students' creative skills. Some students and teachers make the mistake of thinking 'creativity' means to be free from limits or barriers. However, having too much freedom or choice can be paralyzing (Schwartz, 2008). As Ron Berghetto reminds us, 'I have a real problem with 'thinking outside the box' because in reality we need to think creatively inside many boxes' (Berghetto, 2013, p. 139). In other words, working within limits (within boxes) can encourage creativity rather than prevent it. In addition, working within limits better represents the real world we live in and helps to produce more practical and creative solutions. Therefore, the limits within Spark Video could also help students to think and to learn creatively. Moreover, making some decisions automatic or limited frees up students' cognitive resources, thereby reducing cognitive load (the effort being used in working memory) (Merrienboer & Sweller, 2005).

Instead of worrying about font size, animation effects, or background music, students can focus on what is really important—creating, communicating, learning, and using English. One important point to note is that the students did not agree that Spark Video improved their creative skills. However, this may be due to what students understand 'creativity' to be and it is possible Spark Video improved students' creative skills without students being directly aware of this. For example, most students enjoyed finding high quality photographs, choosing icons and music, and creating their online presentations; all of which can be described as creative tasks. In addition, from analyzing students' online presentations, most of their work displayed more evidence of creativity in the images and icons which they used. In other words, their presentations showed evidence of an increase in creative thinking. While they may not have agreed that Spark Video improved their creative skills, their work showed that Spark Video may have done exactly that. A better wording of the question in the survey or additional questions may have better represented if and how students' creative skills were improved.

A related benefit of Spark Video is its use as a storytelling tool. As a highly visual application, students were able to use personal photographs to tell their own stories or to talk about their experiences and ideas. The ability to use the application as a storytelling tool also meant that the students were able to practice specific topics or grammar points from their course. For example, students could be asked to 'talk about three places you have been' (present perfect), 'what did you do last week?' (past simple), or 'how can we create more sustainable cities?' (urban innovation). Because Spark Video is easier to use and less time consuming than

more traditional PowerPoint presentations, it is easier for teachers to mirror or supplement English communication classes so that students can practice and perform the target language which they are studying through creating online presentations.

As well as a storytelling tool, Spark Video is also an educational tool. Popular applications such as Facebook, Instagram, or Snapchat can be adapted for educational uses, but they are primarily social rather than educational applications and so using them for educational purposes can require a lot of work by the teacher. With recent evidence suggesting the potential negative effects of social applications such as Facebook and Instagram on young peoples' mental health as well as the concerns over data and privacy, teachers need to be wary when using such applications in the classroom. In contrast, Spark Video is primarily an educational tool for creating online presentations and telling stories. The app designer, Adobe, has a strong background in developing programs for educational and for professional uses. There are plenty of other online presentation or storytelling applications and websites such as PowToon, SlideShare, GoAnimate, Prezi, or Canva. However, there are issues with these other programs compared to Spark Video. Some of them require subscriptions, others are more suited to laptops rather than mobile devices, while some of them replicated the weakness of PowerPoint in another format.

Most other common online presentation applications also have a steeper learning curve than Spark Video, and the danger is that the students spend more of the semester learning how to use the application effectively rather than using the application to practice and improve their English. Because Spark Video is intuitive and easy to use, students can quickly learn how to use the application and then focus on their developing their speaking, writing, and presentation skills. Although Spark Video is not perfect, it is an educational and storytelling tool with a strong focus on key skills like creating, practicing, and presenting ideas. Creating online presentations is an opportunity for students to change their understanding of what technology allows by moving from consumers of content and entertainment to creating, producing, and publishing their own educationally-focused content and ideas. Allowing students to create and to learn is what all educational applications should aim to achieve. Instead of the technology getting in the way, Spark Video supports students in their learning.

There are several recommendations and suggestions for the future use of Spark Video in university classrooms based on the previous analysis and discussion of the project.

Suggestions and Recommendations

1. When necessary, give students enough class time to create their online presentations, especially at the beginning of the semester.
2. Explore the use of the Spark Video templates. In the application, there are several templates available which use prompt questions to encourage students to tell a particular story or create a particular presentation such as ‘promote an idea’, ‘tell what happened’, ‘a hero’s journey’, ‘teach a lesson’, etc. Each slide in the template contains a title, questions, or hints to help the students create a specific type of presentation. These templates have great potential to support students’ learning and to teach students how to tell different types of stories in different ways depending on the purpose of the presentation or the audience they are trying to engage. Teachers could use the templates in class to support students learning or the students could use the templates at home when they need help creating their presentations. The use of the Spark Video templates to support and promote learning was not explored in this current project.

Figure 3.1: Some of the story and idea templates for Spark Video

3. Explore the use of Spark Video in classes other than English language learning. Given that Spark Video helped students understand the content or topic of their presentations better, there is a lot of potential for the use of Spark Video in more content dominant classes.

4. Build more authentic audiences if necessary by sharing Spark Videos between different classes, different departments, or different universities.
5. Build more interactivity and meaning into creating online presentations by giving students more activities and tasks to do after sharing and watching their classmates' presentations. For example, students could ask questions, discuss their videos, or provide feedback on the university Learning Management System (LMS). Building a conversation around the presentations would help ensure learning deepens and continues beyond just the creation and publication process. As mentioned earlier, it is what happens after a presentation where there can be real potential for learning and discussion. This opportunity was not explored adequately during this project.
6. Provide more non-graded Spark Video assignments to give students more opportunities to learn how to use the application.
7. Create a short online Explainer or How to Videos to teach students how to use Spark Video effectively. If created collaboratively by teachers, the teaching aids could be used as a learning resource for any class thinking of using Spark Video in future. Time restrictions meant this was not a feasible option during this project.
8. Beware the 'millennial student' label and teach students basic digital skills such as finding good images online, searching for effective icons, commenting on other students' presentations using the LMS, etc.
9. Ensure research survey questions are written in English and in Japanese. This project only used English questions, which may have increased the difficulty for students and potentially affected the validity of the students' responses.
10. Design more personal video and presentation assignments for the language classroom. Students were most positive about the personal topics they worked on during the course rather than the more academic topics related to the course. Find more ways to personalize the language or topics they are covering in class so that creating Spark Videos becomes a more meaningful, authentic, and engaging experience for the students creating the presentations as well as for their classmates watching their presentations. This would also make it easier to build more post-presentation interaction and discussion afterwards (suggestion 5).

11. Provide some opportunities for students to write their scripts individually during the course.
12. Design more post-video presentation activities to create a more integrated and blended course. For example, students could have a class discussion about the presentation topic, review or summarize the main ideas, or interview other students about their presentation topics. These activities could all be done face-to-face in the class or online. Because creating Spark Videos is easy to do and less time consuming than more traditional presentations, it allows the teacher to focus on other activities to supplement and enhance students' learning experiences.

Conclusion

Using Spark Video to create online presentations improved students' speaking skills, writing skills, presentation skills, understanding of the course content, and enjoyment of the presentation process. The data from the first-year students was very positive overall, but part of this must be due to mistakes made in the design of the project and the collection of data. In addition, some students did not enjoy recording their voice or writing their scripts. However, just as it is important not to ignore negative results, it is also important to recognize the potential of using Spark Video in the classroom. We should not let the perfect be the enemy of the good. Spark Video is a useful storytelling tool and a useful alternative to more traditional PowerPoint presentations. Because PowerPoint is the dominant presentation software in universities for teachers and for students, its success can limit how students want to present their ideas and encourage conformity rather than innovation. In addition, creating PowerPoint presentations in class can be a time-consuming process which limits opportunities for learning, practicing, and developing students' skills and abilities. As with the most popular social media applications such as Facebook, Snapchat, or Instagram, Spark Video is an easy to learn and easy to use application, but unlike a social media application it maintains a strong educational focus by giving students the chance to tell their own stories or share their own ideas and thereby improve their English language skills and presentations skills. Teachers do not have to be limited by PowerPoint and only offer students one chance to give a presentation during the semester. Because Spark Videos are easy to create, students can have multiple opportunities to practice and learn, to tell their stories, to communicate with their classmates, and to demonstrate their growing skills. The limits

within the application help scaffold the students' learning as well as promote more thinking, more creativity, and more engagement. Finally, Spark Video introduces students to some key 21st century skills and helps them find their voice in an increasingly digital world.

Spark Video cannot completely replace face-to-face presentations, and there are some important skills which students are not able to develop from using the application. However, Spark Video offers students a space to explore and develop other important language and presentation skills and it offers teachers an adaptable tool to design effective and engaging learning activities inside or outside of the classroom. As its name suggests, Spark Video can light the fires of learning and development and help to reignite the learning potential of storytelling and presentations in a world where PowerPoint has, until now, cast a very long shadow.

References

Ambrose, S.A., Bridges, M.W., & Lovett, M.C. (2010). *How Learning Works: Seven Research-Based Principles for Smart Teaching*. Jossey-Bass: Amazon Digital Services LLC.

Bell, L., & Bull, G. (2010). Digital video and teaching. *Contemporary Issues in Technology and Teacher Education*, *10*(1), 1-6.

Brown, P.C., Roediger, H.L., & McDaniel, M.A. (2014). *Make It Stick: The Science of Successful Learning*. Belknap Press: Amazon Digital Services LLC.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*. Taylor & Francis e-Library: Routledge.

Ertmer, P.A., & Ottenbreit-Leftwich, A.T. (2010). Technology Change: How Knowledge, Confidence, Beliefs, and Culture Intersect. *Journal of Research on Technology in Education*, *42*(3), 255–284.

Fay, M.P. & Proschan, M.A. (2010). Wilcoxon-Mann-Whitney or t-test? On assumptions for hypothesis tests and multiple interpretations of decision rules. *Statistics Surveys*, *4*(1-39). NIH Public Access.

Field, A. P., Miles, J., & Field, Z. (2012). *Discovering statistics using R*. London: Sage Publications.

Frommer, F. (2012). *How PowerPoint Makes you Stupid: The Faulty Causality, Sloppy Logic, Decontextualized Data, and Seductive Showmanship That Have Taken Over Our Thinking*. The New Press: Amazon Digital Services LLC.

Hyland, K. (2009). *Teaching and Researching Writing*. London: Pearson Education Limited.

Kirscher, P.A. & De Bruyckere, P. (2017). The myths of the digital native and the multitasker. *Teaching and Teacher Education*, *67*, 135-142.

Kaufman, J. C. & Beghetto, R. A. (2009). Beyond big and little: The four c model of creativity. *Review of General Psychology*, 13(1), 1-12.

Lane, P. & Son, S.N. (2016). Animating Academic Writing Skills through Creating Animated Educational Videos. *Korean Journal of General Education*, *10*(1), 185-218.

Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for effective use of learning technologies* (2nd ed.). London: Routledge.

Levy, L. (2017, December 6). When PowerPoint is Pointless. *Huffington Post*. Retrieved from https://www.huffingtonpost.com/laurie-levy/when-power-point-is-pointless_b_6888410.html

Mann, S. & Robinson, A. (2009). Boredom in the lecture theatre: An investigation into the contributors, moderators and outcomes of boredom amongst university students. *British Educational Research Journal*, *35*(2), 243-258.

Mayer, R.E. (2009). *Multimedia Learning*. Cambridge University Press: Amazon Digital Services LLC.

Oakley, B. (2014). *A Mind for Numbers: How to Excel at Math and Science (Even If You Flunked Algebra)*. Tarcher Perigee: Amazon Digital Services LLC.

OECD. (2010). *The nature of learning: Using research to inspire practice*. Paris: OECD Publishing.

OECD. (2012). *Lessons from PISA for Japan, Strong Performers and Successful Reformers in Education*. Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264118539-en

Patton, A. (2012). *Work that matters: The teacher's guide to project-based learning*. Paul Hamlyn Foundation.

Prensky, M. (2016). *Education to Better Their World: Unleashing the Power of 21st-Century Kids*. Teachers College Press: Amazon Digital Services LLC.

Race, P. & Pickford, R. (2007). *Making teaching work: Teaching smarter in post-compulsory education*. London: SAGE Publications.

Ryan, R.M., & Deci, E.L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, *25*(1), 54–67.

Santrock, J.W. (2011). *Educational psychology*. New York: McGraw-Hill.

Schwartz, B. (2009). *The Paradox of Choice: Why More Is Less*. Harper Collins Publishers: Amazon Digital Services LLC.

Smith, A. (2015, September 23). How PowerPoint is Killing Critical Thought. *The Guardian*. Retrieved from https://www.theguardian.com/commentisfree/2015/sep/23/powerpoint-thought-students-bullet-points-information

Smith Budhai, S. & McLoughlin Taddei, L. (2015). *Teaching the 4Cs with Technology: How do use 21st century tools to teach 21st century skills?* ASCD: Arias.

Sorenson, B.M. (2017, February 24). Let's ban PowerPoint in lectures - it makes students more stupid and professors more boring. *Independent*.

Retrieved from https://www.independent.co.uk/news/education/lets-ban-powerpoint-in-lectures-it-makes-students-more-stupid-and-professors-more-boring-a7597506.html

Van Merrienboer, J. J., & Sweller, J. (2005). Cognitive load theory and complex learning: Recent developments and future directions. *Educational Psychology Review*, *17*(2), 147-17.

Young, J. R. (2004). When good technology means bad teaching. *The Chronicle of Higher Education*, *51*(12), 31-32.

Appendix A

Results of Data Analysis of General Learning Experiences

UNI LEARNING EXPERIENCES	**1**	**2**	**3**	**4**	**5**	**P/N**
I have learned how to give presentations at university.	13.3	13.3	53.3	13.3	6.7	10/42
	54.5	27.3	18.2	0	0	+32
It is helpful for my learning to see the work of other students.	13.3	36.7	33.3	13.3	3.3	43/45
	45.5	45.5	9.1	0	0	+2
I enjoy sharing my English work with other students.	20.7	24.1	41.4	6.9	6.9	40/40
	36.4	45.5	18.2	0	0	0
Doing final exam vs doing several small projects/assignments?	Exam	Projects		Not Sure		
	20	53.3		26.7		
	27.3	45.5		27.3		
SKILLS						
I am good at giving presentations in English.	6.5	12.9	38.7	12.9	29	-35/38
	18.2	72.7	0	9.1	0	+73
How good are your English speaking skills at the moment?	6.4	12.9	22.6	48.4	9.7	-49/26
	18.2	45.5	27.3	9.1	0	+75
How good are your English writing skills at the moment?	6.5	9.7	48.4	22.6	12.9	-26/22
	18.2	27.3	54.5	0	0	+48
How good are your communication skills at the moment?	3.2	19.4	38.7	25.9	12.9	-23/37
	45.5	27.3	27.3	0	0	+60
I enjoy doing presentations in English.	3.3	30	40	23.3	3.3	8/38
	54.5	27.3	9.1	9.1	0	+30
I enjoy doing English homework.	9.7	22.6	45.2	19.4	3.2	14/22
	18.2	36.4	36.4	9.1	0	+8
I enjoy doing assignments (割り当て) in English.	16.1	19.4	61.3	0	3.2	44/31
	27.3	36.4	36.4	0	0	-13
I am good at expressing myself through writing in English.	6.5	29	48.4	3.2	12.9	22/45
	45.5	45.5	9.1	0	0	+23
I believe doing assignments improves my English a lot.	29	35.5	29	3.2	3.2	80/49
	45.5	54.5	0	0	0	-31
I hate the sound of my voice when recorded on a smartphone.	Y:48.4	N:12.9	?:38.7			
	Y:45.5	N:45.5	?:9.1			
Teachers should let students use smartphones when learning.	Y:48.4	N:9.7	?:41.9			
	Y:45.5	N:27.3	?:27.3			
I enjoy doing assignments (割り当て) in English.	9.7	32.3	51.6	3.2	3.2	46/43
	27.3	63.6	9.1	0	0	-3

Appendix B

Results of Data Analysis of Spark Video

Online Presentations/Spark Video	**1**	**2**	**3**	**4**	**5**	**T/B**	**P/N**
Spark Video is easy to use.	36.6	54.5	9.1	0	0	90.9	44/0
						0	P:44
It is easy to create online presentations using Spark Video.	27.3	72.7	0	0	0	100	47/0
						0	P:47
Creating online presentations improved my writing skills.	9.1	63.6	27.3	0	0	72.7	33/0
						0	P:33
Creating online presentations improved my pronunciation.	27.3	54.5	18.2	0	0	81.8	39/0
						0	P:39
Creating online presentations improved my presentation skills.	54.5	27.3	9.1	9.1	0	81.8	42/4
						9.1	P:38
Using Spark Video helped me to be creative with creating a presentation.	40	50	10	0	0	90	40/0
						0	P:40
Creating a presentation with SV is easier than creating a presentation with PPT.	63.6	36.4	0	0	0	100	51/0
						0	P:51
Creating a Spark Video helped me to understand the content/topic better.	20	60	0	20	0	80	17/4
						20	P:13
I prefer creating a Spark Video than giving a presentation with PowerPoint.	63.6	27.3	9.1	0	0	90.9	47/0
						0	P:47
I enjoy sharing my spark videos with my classmates.	36.4	54.5	0	0	9.1	90.9	44/5
						9.1	P:39
Spark videos are more enjoyable to watch than PowerPoint presentations.	36.4	36.4	27.3	0	0	72.8	36/0
						0	P:36
With Spark Video, do you prefer using icons or photographs?	Icons: 9.1	Photo: 45.5		Both: 45.5			
Do you prefer writing the script by yourself or with another student?	Me: 54.5	Student: 36.4		Don't Mind: 9.1			
Did writing your scripts with other students help improve your writing skills?	Yes: 100%	No: 0%					
Online presentations/SV are better than face to face presentations/PPTs?	63.6	18.2	9.1	0	9.1	81.8	43/5
						9.1	P:38
Will you use Spark Video to create online presentations in future classes?	Yes: 81.8	No: 9.1	?: 9.1				
I enjoy sharing my learning with other students using Spark Video.	Yes: 81.1	No: 9.1	?: 9.1				
How much did Spark Video improve your English skills?	Huge: 18.2	A lot 63.6	A Little: 9.1		No Diff: 9.1		

Appendix C

Thematic Content Analysis

Open Questions			**Thematic Analysis Results**
1	Do you think doing online presentations is a good way to learn?	1	Speaking Skills x3
		2	Learning x3
		3	Communication Skills x2
2	What 2 things did you like about using Spark Video?	1	Choosing photos/icons/music x6
		2	Learning x2
		3	Writing x2
3	What 2 things did you NOT like about using Spark Video?	1	Writing x3
		2	Recording Voice x2
		3	Technical Issues x1
4	Do you think creating presentations with SV is better than creating presentations with PPT?	YES x6	
		1	Easy to use x4
		2	Recording Voice x2
		NOT SURE x2	
5	Did Spark Video improve your presentation skills? How?	YES x5	
		1	Presentation Skills x3
		2	Speaking Skills x2
		NOT SURE x2	
6	Did Spark Video improve your creative skills? How?	YES x5	
		1	Expressing ideas visually x2
		2	Creating/Thinking x2
		NOT SURE x2	
7	Did Spark Video improve your English skills? How?	YES x6	
		1	Pronunciation x4
		2	Writing x2
		NOT SURE x1	