Project-based learning in the Japanese medical ESP curriculum
- Examining implementation of video projects in the university classroom -

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1. Introduction
This pedagogy-focused paper discusses the use of video projects in the medical, nursing, and pharmaceutical English for specific purposes (ESP) classroom. The perspective taken with respect to ‘research’ in this paper is one of practitioner description and elucidation of educational techniques of potential interest and importance to fellow English language teachers, within or outside of the ESP specialty. Thus, the information presented here is not intended to represent a specific investigation into the pedagogical effects of using videos in a project-based learning context in the English language classroom, but rather this article is a description and discussion of the pedagogy itself. As such, it represents a partial response to Garton and Richards’ (2015) criticism of the dominant teacher-researcher and practitioner-researcher paradigms that require teachers to engage in theorization of their practice rather than concentrating on the technical aspects of their teaching in their writing for publication efforts. Furthermore, with its emphasis on teaching practice in the ESP classroom, this paper also addresses Watson Todd’s (2003) criticism of the ESP literature in general, which he claims tends foreground delineation of what to teach and treats the techniques and strategies required to teach language, or “the ‘how’ of EAP” (p. 148) as of less interest and importance. With these objectives in mind, the paper is structured unconventionally, with the discussion of the pedagogy foregrounded in section 2, which pays attention to “making historical work available” (Nunn, 2015, p. 62) by describing the evolution of my thinking about my teaching, followed by a discussion of some of the relevant literature on the topic of using videos in the classroom and its implications for the pedagogy described here in section 3. Section 4 turns to consideration of potential research projects that could be used to investigate the effectiveness of the pedagogic strategies described here, although the actual implementation of such investigations is left to future reports.

2. Summary of the pedagogic adoption of English video projects
This section, which comprises the bulk of this article, is concerned with how video projects were implemented in my ESP classroom with medical, nursing, and pharmaceutical students, and some of the reasoning behind their inclusion as an additional pedagogic tool in my technical teaching skillset. It is worth noting here that while I am aware of technologist rhetoric regarding the disruptive nature of new so-called Web 2.0 developments (see Prensky, 2010 for a summary and Bennett, Maton, & Kervin, 2008 for a criticism of the educational paradigm), as a teacher practitioner, my perspective regarding the use of student created videos as
part of a project-based learning paradigm is that they represent an incremental development in my own teaching practice. This means they are not a disruptive development which displaced my previously entrenched practice, as the technologists have tended to portray the integration of technology into the classroom, but rather have been adapted to fit aspects of my teaching skillset as a means to enhance and improve learning objectives and outcomes. With this in mind, this section begins by summarizing two general teaching strategies that have their origins before the beginning of my use of video projects. Each of the sections describes how pedagogic activities already in use were adapted to incorporate student generated videos, and considers the potential benefit to students of the video projects. The third section describes how the video projects were integrated into the syllabuses of my various classes, and the fourth section discusses how the use of video projects in my classrooms could potentially be improved in the future.

Before moving on to a discussion of the pedagogy of video projects, however, it is first necessary to discuss the issue of why I was interested in project-based learning in the language classroom at all, and to offer a definition of what project-based learning is. As Stoller (2006) explains, “The versatility of project-based learning makes it difficult to articulate one single definition that takes into account the various ways the concept can be translated into practice” (p. 23) and thus, in a sense, the explanation of the specific pedagogic activities which follow serve as a detailed explanation of my personal interpretation of project based learning as it is applied in my classroom. Nevertheless, Fried-Booth (2002) offers an accessible definition of the concept of project-based learning generally:

Project work is student-centered and driven by the need to create an end-product. However, it is the route to achieving this end-product that makes project work so worthwhile. The route to the end-product brings opportunities for students to develop their confidence and independence and to work together in a real-world environment by collaborating on a task. (p. 6)

It should be noted that in this paper, the terms ‘project’ and ‘video projects’ are used interchangeably with project-based learning. I should also note that my institution has taken an interest in the active promotion of project-based learning, although my interest in the use of the technique as a language teaching strategy predates these relatively new officially sanctioned classroom pedagogy promotion efforts.

My interest in the implementation of project-based learning in general developed initially from the desire to improve my teaching practice and has been ongoing since at least 2004. The idea of incorporating videos into the projects my students were already completing came from a belief that the change would allow for increased learning opportunities, an insight that is largely supported by the literature reviewed in section 4, although it should be noted that the literature cited there was largely consulted after I had already used video projects in my classrooms, and so represents a post-hoc justification for my use of videos as part of my students’ learning projects. The impetus to use videos in my classroom projects originally emerged through my attendance at
John Unger’s (2014) plenary presentation at the English Scholars Beyond Borders (ESBB) Conference in Izmir, Turkey, where he described his own research into the use of video projects with his EAP students at a four-year college in the Southeastern U.S. and my subsequent reading and reviewing of his co-authored paper submitted for publication to the open peer reviewed online ESBB publication (Unger, Liu, & Scullion, 2015). However, rather than adopting his video technique in my classes, I instead adapted the use of videos to activities I was already having my students do, expanding the scope of the classroom activities to incorporate videos rather than completely abandoning my earlier teaching strategies. It is to this stepwise, incremental adaptation of videos to my classroom, and my classroom to the use of videos, that the following two sections turn.

2.1 Adapting textbook activities into video projects: A Nursing ESP teaching innovation

The adaptation of textbook activities in my English language classrooms has a relatively long history, with Muller (2005) and Muller (2007) representing early efforts at having students expand upon the information available in their textbooks. In the case of my nursing English ESP classes, taught to both first and second year students majoring in a four year nursing undergraduate degree program, the corpus-inspired textbook, *Cambridge English for Nursing Pre-intermediate* (Allum & McGarr, 2010) includes a number of nurse-patient listening dialogs and also information gap role-play activities. The presentation in the textbook is generally a listening exercise with accompanying comprehension questions followed by an information-gap activity based on a conversation with a structure similar to the immediately previous listening activity. The authors of the textbook appear to assume that students will be able to transition from hearing the language in the listening exercises to producing it in the information gap activities. However, my experience with my students in using the textbook has been that students have considerable difficulty in understanding and following the relatively natural speech of the corpus-inspired listening dialog, and then have even more trouble in completing the information gap activity as presented. Thus the classroom adaptation I made was to have the students work in pairs to examine the transcript of the listening exercise and rewrite it to fit the new conversational context of the information gap activity. Students submitted their scripts for holistic assessment, error correction, and feedback regarding how successfully they accomplished the goals of the activity and then practiced the corrected script as a dialog in class. I quickly realized that students were copying language verbatim from the original listening exercises, and so I added an additional dimension of complexity by asking students to try to change vocabulary from the listening dialog to maintain the intended message but to package it in a different way by asking them to choose at least one different word for each line of dialog. This helped to discourage uncritical copying of stock phrases and encouraged the consideration of alternative ways of expressing an intended message in English. I believed this activity was generally successful, and my students and I were largely happy with it, but I also felt that in terms of its dimensionality, rewriting the dialogs to fit an information gap activity essentially took what was intended as a communicative speaking task and turned it into a writing task, with reading aloud included at the end to retain some resemblance to the original spoken
nature of the information gap activities.

I decided to incorporate video projects into the activity in the hopes that this would add more importance to the reading/speaking exercise that followed the creation of the information gap script and also because I believed that with creation of the videos, it would be possible to extend the activity further by developing listening-based homework activities from the resulting videos. One point I took away from Unger (2014) and (Unger, Liu, & Scullion, 2015) which was retained in my implementation of the video activities was the decision to not include the students themselves in the resulting video productions. Thus they were instructed to film a kind of puppet show in groups of four, using A4 paper and white name cards that they illustrated. After the videos were finished, they were uploaded as unlisted videos to YouTube and then linked via a Moodle Forum, and students were assigned to watch a minimum of two other groups’ videos and comment on them (in the class Moodle forum) as homework.

2.2 Split storytelling and video projects

Another technique I use with undergraduate medical and pharmaceutical students is split stories (Deacon & Murphey, 2001), which involves telling the first part of a story and stopping at the climax then some time later finishing the story. Deacon and Murphey (2001) suggest the teacher first tell the first part of a story and then have students write it in class then complete the second part of the story for homework before the teacher tells the ending to the story in the next class. While I have followed their suggested lesson pattern, depending on available class time, I have also told both parts of the story in the same class, bookending the class with the first part at the beginning of class and the second part at the end. For an example of the two parts of one such story, please see Muller (2015a) and Muller (2015b). Previous to the implementation of the video projects, similar to the nursing students’ dialogs described in 2.1, students would work on writing the stories, their guess as to the endings, the actual ending, and then their impressions of the stories. I would then collect their writing and offer them some formative feedback, which would mark the end of the activity. While this was certainly an enjoyable activity, and I expanded it to include asking students to create their own split stories, I also felt that there was room to make the activity more communicative and performative, and to give students a chance to tell the stories orally themselves in an uncontrived context. How I went about doing this using video projects is the topic of section 2.2.1, followed by a discussion of a more advanced project which developed from the success of student video storytelling.

2.2.1 Adapting split stories into videos

While my teaching of the creation of video projects from split stories has undergone some evolution, the most current classroom sequence at the time of writing involved separating the writing of the ‘story’ and the creation of a script for use in the video project. I ask students to write both parts 1 and 2 of the stories in groups of four and then after giving holistic feedback on and error corrections of their writing, they convert the
stories they have written into a script, involving specific characters’ lines and narration. They generate storyboards for their videos, and then after creating script and storyboard, I give each group further formative feedback before they create two videos, one for each part of the story, following the same instructions as for the nursing videos described in 2.1 to make a kind of puppet show rather than having any students appear in the videos.

The video project system as currently implemented gives students the chance to tell stories orally which were previously only written, and the movement from oral story to written story to video script involves multimodal thinking on their part as they have to adjust the language used to that appropriate for each of the different mediums (Doering, Beach, & O’Brien, 2007). It also gives them further opportunity to manipulate the language through the additional stages of video planning and creation (Nikitina, 2011). Furthermore, once the videos have been created, in the same manner as for the nursing students they can be shared via a Moodle forum and students can be assigned to watch and comment on the videos as homework, giving them further English language practice.

2.2.2 Adapting literature into videos

Following on the successful creation of videos based on split stories told by me as the teacher and split stories told by my students, I decided to challenge my students further by assigning them the homework of selecting a journal article from the research literature for the generation of a split story project video based on the research described in the article they selected. I began by giving an example of my own from the literature, based on Sana, Weston and Cepeda’s (2013) investigation of the hindrance to learning caused by laptop multitasking for both multitasking students and “nearby peers” (p. 24). In my presentation, I split my explanation into two parts, first explaining the experimental design then asking students to predict the experimental results, and finally sharing the findings of the research, following the same protocols as described earlier for the use of split stories; asking the students to also write the story in pairs and then using that writing to give formative feedback and to evaluate student understanding. The students shared their different selected journal articles in groups of four and then chose one to use for the creation of a video. They then went through the stages of scriptwriting and storyboard generation, which I approved before they could begin creating their part one and two videos.

This is the only activity described here without a direct analogue from my classroom practice before the use of video projects, so rather than discuss how this activity expands on my previous practice, I will instead comment on how this activity helps to develop the split story task more generally. In my own stories, as evidenced in the examples cited above (Muller, 2015a, 2015b), as these are English for medical purposes classes, I tend to incorporate medical themes into the stories I share with my students. However, I found that students’ stories tended to incorporate personal, non-medical and non-technical themes. While I felt that as a part of their general English education, such personal expressive exercises were quite beneficial, I also knew
that at least some students were interested in being able to access and practice interacting with more technical English in my lessons. Thus I decided to try this project at the end of the Spring 2015 semester in two classes, and was pleasantly surprised with the results. One issue that remains unclear is whether pedagogically, this is best reserved for the penultimate video project in a semester, or if students would be able to successfully complete such a project earlier in the semester, allowing for the incorporation of more than one video project based on adaptation of a research article they have selected.

Having described the pedagogy of using videos in my classroom, the next section turns to a consideration of how these projects are incorporated into my overall syllabus.

2.3 From project to syllabus: Integrating video projects into the curriculum

While using video projects as described above has brought with them a number of benefits, it was also necessary to consider how to incorporate the projects themselves into the overall syllabus for my classes. The strategy I’ve used to do this has followed one of two separate strands of implementation, a project-light approach and a project-heavy approach.

The project light approach has primarily been used with my nursing classes, where there is already a textbook in use, and so the projects have been incorporated into the already existing framework used for my lessons. In terms of syllabus adjustment, previously a large percentage of class grades were dependent on active participation, which includes completion of homework. With the introduction of the video projects, the percentage of grades based on the active participation component has decreased, and a fourth category of grading, concerned with the project work exclusively, including the writing of scripts and creation of videos, has been created. Thus currently class percentages are divided evenly between active participation, project work, short in-class quizzes, and a final test, with 25% of the final score assigned to each. In these classes to date it has generally been possible to incorporate a total of three video projects over the course of one 15 week semester of 90-minute classes.

The project heavy approach includes the same grade spread as the project light approach, although the contents of the short quizzes are based on the vocabulary used in and the messages contained in the video project stories, and much more of the homework involves commenting on and responding to comments on the video projects, and so while the percentages remain 25% each, the project work has a stronger influence on all four of the grading categories than in the project light implementation. In these classes projects are the mainstay of the class plan, and so in almost every class there is some work done on some component of a video project, although the addition of videos generally means that the former story writing projects take longer to finish. In these classes, depending on the ability of the students, it’s possible to complete four or five story projects over the course of a 15 week semester. I’ve generally used the project heavy approach with my medical and pharmaceutical classes, which don’t use a textbook. I did try one project heavy approach with a second year nursing class using my usual textbook (Allum & McGarr, 2010), although I found that the
experience was rather unwieldy, as I allowed students in groups of four to select a dialog or scene from their textbooks from which to develop a project video, which resulted in a lack of structure to the course and going directly from one project into the next meant there wasn’t time for me to work to consolidate the language that the different groups had used for their individual projects with the class as a whole. This topic of some of the difficulties I faced with this particular class of nursing students leads into the last part of this section, a discussion of potential strategies for further improving the pedagogic efficacy of video projects in my classroom.

2.4 Looking forward: Potential strategies for improving the way video projects are implemented in my classrooms

The largest concern I currently have with respect to my students’ use of video projects in my English language classroom is that there is very little explicit evidence of student meta-analysis of their language use in the videos themselves or as part of the project process. To put it another way, while the students are successfully creating the videos, when I probe them about why they have made the decisions they have in terms of language use, there is little evidence of a critical stance toward or understanding of the language usage decisions they make. Even in cases where they have used contextually appropriate language, they are unable to signal that they have selected that language because it is appropriate. Yet if the objective of English language teaching is to give students the semiotic language resources necessary to effectively communicate purposively in English, then that objective is not currently being attained with the way video projects are currently implemented in my classroom. Some strategies I am currently considering to address this include asking students to continue to create the videos as described here, but then to add an additional step where the students explain the language they used and how they went about selecting it or adapting it from the original textbook language, depending on the specific video project context. This additional step, while it would require more time to complete individual video projects, as there would be additional time needed to prepare and create the second reflective video, would hopefully stimulate student thinking about why they made the decision to use particular words or phrases, and the communicative consequences of those choices. A technical issue for me as a teacher going forward is how to rhetorically frame this extra step for my students so they both understand its purpose and how to go about successfully accomplishing this additional task. Adding this additional step to the video projects would also bring my teaching techniques closer to my original inspiration for using video projects in the first place, as Unger (2014) and Unger, Liu, and Scullion (2015) describe students who in their videos don’t create a kind of puppet show as described above, but rather are videoing posters with language on them, and talking through the language on their posters in order to engage their audience and actively work with language chunks to realize rhetorical activities which ultimately serve the purpose of preparing them for such academic tasks as summarizing an article and providing critical commentary on its contents.
Other concerns of mine are more technical in nature, but nevertheless could have significant ramifications in terms of the effectiveness of the video project pedagogy. One is that I eventually came to the realization that not every story written by the students has to be adapted into a script, and not every script needs to be developed into a video. This means that I can ask students to individually work on writing the different parts of the stories themselves, then they could perhaps work in pairs to adapt those stories into scripts and storyboards, and finally pairs can be joined into groups of four to negotiate a final script and create a video. This strategy has the advantage of cutting down on social freeloading throughout the project process, as one student doesn’t end up writing the entire output for a group of four. It also brings with it some flexibility in terms of grouping, as absent students from pairs can be accommodated for when making groups of four students, in contrast to situations where I’ve created a group of four at the beginning of the project process, and then different students at different stages throughout are absent, meaning the group performance over the course of the entire project suffers as a result.

Another concern I have is with the amount of time required to make the puppet materials. While students seem to enjoy making the backgrounds and characters for the videos (see Muller 2015a & 2015b for an example), this is generally not time spent conversing in or practicing English, the overt objective of my lessons. One strategy I hope will address this is to recycle previous students’ props from past projects in my upcoming classes. What isn’t clear is whether this recycling is going to adversely affect the students’ sense of ownership of and agency over the video projects, and so this is an issue I intend to monitor going forward.

Not directly related to the creation of the video projects themselves, but certainly of relevance to their pedagogical efficacy is the nature of the comments given by students on their classmates’ videos and the potential for these to be developed into more robust communicative events. To date, the majority of comments tend to consist of only one or two sentences, which are not responded to by the makers of the videos. While this is a bit of a problem in terms of the homework of commenting, asking questions, and responding to questions in the Moodle forums generally, it is also a relevant concern with respect to students’ viewing and commenting on other groups’ video projects. Ideally, the writing of comments on videos could be developed into a more robust communicative event, with the potential for the kind of meta-discussion of the language used in the videos that would demonstrate some level of criticality with respect to the English used. How to go about accomplishing this goal remains a challenge.

The final concern I’ll raise here is with regard to the technology itself. I began asking students to record the videos using student smartphones, but there were considerable technical issues in getting the video from their smartphones to my computer or onto the Moodle forum. The solution I implemented was to purchase six point and shoot digital cameras with video capture capability for the filming of videos and SD cards to facilitate quick transfer from the camera to my computer. However, the video files were far too large to be hosted directly on the Moodle forum, which resulted in my using unlisted YouTube videos for the purpose. While this is an adequate solution, the nature of unlisted YouTube videos is that anyone with the URL can share them, and
some students have shared the videos after they have been posted to the Moodle forum. While it is arguable that the sharing of videos is a natural part of university students’ social lives (Prensky, 2010), there is also the issue of having videos created as a mandatory part of a university course being widely distributed. My solution to date is to try to make the videos anonymous so that only a group number is included in the YouTube video title, however students, in sharing the videos, self-reveal their identities, and what is ethically uncertain is whether they fully understand this themselves when they engage in such sharing. Fortunately, the nature of the videos created by students to date is such that there is little to be concerned about, but the potential for this to be an issue in the future is one that I need to keep in mind. An ideal solution would be a university hosted one which required authentication using a university account to access, but this infrastructure is unfortunately currently unavailable. Also, it is unclear whether such an infrastructure would give the same kind of valuable analytics usage data offered by YouTube.

3. Theoretical underpinnings of video use in the classroom: A non-technologist view of using technology in the classroom

In terms of connecting the discussion above to the literature on the creation of video materials in the English language class generally and the ESP or EAP classroom more specifically, there have been a number of investigations building on the theme of the benefits of project-based research for the language classroom, with authors generally considering the use of video projects in the language classroom to be a subset of the larger project-based learning paradigm (Huang, 2015). A competent overview of some of this literature is included in Huang (2015), who investigated the influence of student created videos on learning and motivation. While the stance taken in this paper is in direct opposition to the disruptive pedagogy component of such technologist literature, there are nevertheless some worthwhile insights from investigations into the use of video projects that are of relevance to the video creation teaching approach described here.

Three of the potential advantages of video projects according to the available literature are considered in more detail here, including improved student learning and motivation (Huang, 2015), increasing the opportunity for students to speak (Hung, 2011) and presenting students with opportunities to learn language in communicatively authentic situations (Nikitina, 2011). Huang (2015) investigates the use of video creation tools with 43 freshman engineering majors at a Taiwanese university, examining changes in their language ability during the course and changes to their language learning motivation. Huang’s (2015) investigation reports statistically significant improvements in students’ scores on a standardized measure of their English ability, TOEIC test scores, and also significant increases in their language learning motivation. Huang (2015) also notes gains in students’ technical movie making skills. Huang’s (2015) description of improvement in student language ability and language learning motivation offers encouraging support for the video projects described here, and also suggests potentially fruitful methods for future investigations of the actual effects on learning of the video projects discussed in this article.
Hung (2011) describes the use of vlogs with 17 Department of English students in their final year at a university in Taiwan, using a survey instrument, questionnaire, interviews, written feedback, analysis of the students’ vlogs, and reflective journals to assess the overall effectiveness of the pedagogical intervention. Hung (2011) notes that the creating and uploading of videos is technically demanding and time consuming for students, suggesting that one of the potential advantages of the video projects described above is that the videos are created using handheld digital cameras and uploaded in bulk by me as the teacher. While this admittedly restricts the students’ ability to practice the technical skills involved in online video creation, it also facilitates a faster video production and upload cycle.

Nikitina (2011) describes the use of video productions with 37 learners of Russian in Malaysia, using researcher observation and analysis of the videos students produced. She notes that students’ use of fictional scenarios in their videos creates opportunities for them to practice and use language in authentic communicative contexts (Nikitina, 2011). Similar to the video creation methods used in my classrooms, she notes, “The filming of the video can begin only after the scripts are ready and well-rehearsed” (Nikitina, 2011, p. 39) treating the process of script creation and practice as an important part of the learning process and the actual videos as what Goldfarb (2002) calls, “visual icing on the textual cake” (p. 20).

One incompatibility of the literature with the process described here is that it tends to be technologist in nature, encompassing the creation of video through the appropriation of content found on the internet in order to generate new content. The video projects described here have been done with generally only one computer in the classroom—the teacher’s—and the videos themselves are very low-tech puppet shows, with the technology showcased being the digital camera itself (see Muller 2015a & 2015b for an example). The kind of video editing described in literature such as Huang (2015) has simply been unavailable in my classrooms to date. Yet perhaps an encouraging message for teachers to take away from this is that it isn’t necessary to ensure every student has access to a high end video editing capable workstation in order to have their pedagogy benefit from the inclusion of video projects in their classrooms.

4. Considering issues of research: Moving from a pedagogy to an investigative paradigm

In terms of the potential to research the use of video projects in the medical ESP classroom, the kinds of projects described here have considerable potential for yielding fruitful research. As mentioned earlier, the meta-commentary videos I’m planning to add to my curriculum would help to contribute to the research paradigm being forged by Unger (2014) and Unger, Liu, & Scullion (2015). There is also the potential to investigate student usage of the videos as language learning and practice resources through analysis of usage statistics using Moodle and YouTube’s usage tracking capabilities. Finally, the motivation and agency of students as they language (Swain, 2006) their way through the different stages of the video projects and the various commentary on the projects could also help to reveal how they construct their identities as English language users during the course of the semester, perhaps following in the footsteps of Huang’s (2015)
research methodology.

5. Conclusion

This paper set out to present a description of the pedagogic implementation of video projects in my medical ESP classes. It covered two of the classroom activities I adapted to include a student created video element, a textbook information gap activity and split storytelling. I also explained how the incorporation of videos into my language teaching repertoire influenced my syllabus organization, in both a video project light and video project heavy paradigm. This was followed by discussion of some of the issues I’ve faced in the use of videos in my classroom, the biggest of which in my opinion is the challenge of encouraging students’ critical awareness of their language use. After my description of my pedagogy, I shared a brief discussion of some of the literature on the topic of student created classroom videos, which was followed by some consideration of potential future research that could be developed from the video projects described here. The overall position taken in this paper is that an examination of the technical aspects of my teaching practice can itself represent a kind of research, insofar as it explores my professional craft and seeks to explain, expand upon, and develop the language teaching strategies I use in my classroom. This stance is partially drawn from Garton and Richards’ (2015) criticism of the teacher research paradigm which calls for teachers to theorize their practice, thereby devaluing the actual everyday technical craft act of teaching, and also Watson Todd’s (2003) criticism of ESP as a field concentrating more on issues of “what” (p. 148) content to teach than teaching techniques appropriate for the special purposes classroom.

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References


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