The Connection of Digital Media with Curricular Goals - Innovative Use of Digital Media Portfolios and Cultural Content in Standards-based German projects

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Abstract

This paper shows how digital video tools were used in German instruction for high school learners. These tools are products that students can learn and implement easily to produce quality speaking and visual portfolios, and engage in meaningful language learning contexts. The portfolios support curriculum planning by meeting foreign language standards, and address technology standards such as the NETS-S of ISTE. The work of two students over two years with digital media shows how their language and technology proficiency improved. This work adds to the latest research by informing readers of innovative uses of digital portfolios in foreign language programs.

1. Introduction

In recent years, the use of digital media as a learning tool has found favor with educators in the foreign/second language education field. In the foreign/second language literature, Travieso-Parker, Shrum, and White (2007) have advocated the use of digital editing software such as *iMovie* to create digital narratives of their experiences. By doing this, this can help to provide insight into the processes of second language acquisition (Bardovi-Harlig & Bergstrom, 2006; Liskin-Gasparro, 1996; Langer de Ramîrez, 2006), and can also help students gain a better construction of their own identities (Travieso-Parker, Shrum, and White, 2007). Shrum and Glisan (2005) have argued that technology in foreign/second language learning, including digital media, is an effective tool that helps students "expand their oral expression, acquire new language, learn about cross-cultural perspectives, and interact with content knowledge" (Shrum & Glisan, 2005, p. 408).

For these reasons, foreign language teachers are in a position where they now need to integrate technology goals and practices into their curricula. Various authors have advocated that technology in curricula is effective in the enhancement of the learning process for students (http://www.edutopia.org/technology-integration-introduction). Specifically, technology has supported curricular goals by helping with active engagement, participation in groups, frequent interaction, and connection to real-world experts (http://www.edutopia.org/technology-integration-introduction). In the foreign/second language education field, it has been suggested that teachers in the field begin to start an integration of foreign language standards as well as technology standards into their curricula and daily lessons (Hubbard, 2008).

The purpose of this paper is to present how students in my intermediate to advanced German classes at a high school used digital media resources over a two year time frame to create projects that helped improve their writing and speaking proficiencies in German, as well as improve their proficiency in the use of digital media software such as Windows Movie Maker, using digital photos, and creating digital portfolios that the students could show any person and take with them anywhere.

This paper has four parts. The first part includes a theoretical framework that underpins the goals and applications of this project. The second part includes a description of the digital media projects by documenting the progress of two students in the German program. In the third section, the author includes an implementation framework for the project that other foreign language teachers can use in the classroom. The fourth and final section includes implications of integrating digital media into foreign/second language instruction.

The rationale for creating and implementing these projects lies in the following. First, it was essential that the students make gradual improvement of their German proficiency over a two-year period, namely in speaking and writing. Second, implementing these projects with the students aligned classroom teaching practices with the National Standards for Foreign Language Learning, and helped the students to meet the NETS-S standards created by ISTE. Third, it was assumed that by integrating technology in the German classroom, students might feel some sense of empowerment as their language proficiency and technology proficiency improved.

2. Theoretical Framework

In the foreign/second language profession, language teachers are now expected to align their teaching practices to *the* National Standards of Foreign Language

Learning, which are the content standards foreign language teachers use today in their classroom practice. The authors of the Standards have attempted to draw attention to a broad view of second language study and competence, specifically, what learners should know and be able to do (Standards, 1996). In addition, this view of second language study and competence included how learners should be able to perform in the foreign language (Standards, 1996).

ISTE's National Educational Technology Standards for Students (NETS-S) have been present in the literature since 1998, but because foreign language has often not been considered as a "core content" area, it has not received as much attention from the public or politicians than math, science, or language arts (Ennis, 2007).

In recent years, various authors have emphasized that a need exists for significant technology integration in the foreign/second language classroom. As an element of today's classroom instruction, technology can help foreign/second language learners develop skills in communication, critical thinking skills, learning strategies, and also help learners develop knowledge about language and culture (Standards, 1999). According to Falsgraf (2007), "technology can help us to become efficient enough to individualize instruction, to plan for proficiency, to measure students' progress toward the goal of communication in realistic situations" (p. 15). Ennis wrote that foreign language students face a "daunting learning task" as they continue to practice reading, writing, speaking, and listening, and this task is difficult to achieve without the use of technology (Ennis, 2007, p. 25).

Research has been conducted that has shown that technology can be used as a tool to acquire specific aspects of language such as vocabulary, and skills such as reading and writing (Shrum & Glisan, 2005) Specifically, it has been shown that technology has been effectively integrated into language learning in the following ways:

- Facilitating acquisition of vocabulary (Beauvois, 1997; Chun & Plass, 1996; Davis & Lyman-Hager, 1997; Grace, 1998; Jones & Plass, 2002; Pennington, 1996)
- Support input-rich activities through use of reading assistant software, integrated video, and the Internet (Cononelos & Oliva, 1993; Davis & Lyman Hager, 1997; Garza, 1991)
- Facilitate increased writing through use of writing assistant software, e-mail, and chatrooms (Chikamatsu, 2003; Oliva & Pollastrini, 1995; Suh, 2002)
- Provide intelligent computer-mediated feedback (Cononelos & Oliva, 1993; Kern, 1995; Nagata, 1993, 1999; Nagata & Swisher, 1995)
- Enhance listening comprehension and retention (Jones & Plass, 2002; Murphy & Youngs, 2004)
- Facilitate exploration of authentic language use through e-mail or the Internet (Oliva & Pollastrini, 1995)
- Enhance student motivation (Borràs & Lafayette, 1994; Gonzàlez-Bueno & Pérez, 2000; Lee, 2002; Masters-Wicks, Postelwate, & Lewental, 1996) (adapted from Cubillos, 1998; updated by Shrum & Glisan, 2005; p. 410)

In addition to research on technology and language learning, various authors in the foreign/second language profession have expressed that "planned and purposeful use" of technology can benefit teachers as they plan lessons, and benefit students as they learn a foreign/second language (Shrum & Glisan, 2005, p. 408). Shrum and Glisan wrote that purposeful use of technology helps teachers to connect the five C's of the National Standards for productive language experiences (Shrum & Glisan, 2005). Terry (2007) suggested that language teachers need to be using technology because it is an excellent "vehicle for teaching" which they need to know how to use in order to "coach" students to understand and use it (Terry, 2007, pp. 57, 61).

The benefits to second/language learners with meaningful integration of technology resources are also prevalent in the literature. Blake (2008) has suggested the following benefits to students:

- Integrating technology properly into the curriculum can accelerate the focus on the student-centered classroom. (Blake, 2008)
- Students can negotiate meaning in their second language (L2) and also make sense of their world with the inclusion of new L2 elements (i.e., new, emergent technologies) and forms of expression (Blake, 2008)
- Technology can facilitate student pride in their cultural identities and show respect for other cultural realities (adapted from Cummins and Sayers, 1995, p. 109) (Blake, 2008)
- Technology (including digital technologies) can help students transform themselves by learning an L2 and discover new learning pathways. (Blake, 2008) (Note: Blake defines these pathways as a "third space.")
- The successful integration of technology into a foreign language curriculum requires students to reflect on what they are doing and put it into practice (Blake, 2008)

According to Falsgraf (2007), the most appropriate use of technology is to provide authentic, contextualized tasks with members of a target language speech community (Falsgraf, 2007). By doing this, teachers and students find

that technology helps the second language become more real and accessible (Shrum & Glisan, 2005).

The digital media projects created by my students are underpinned in the following assumptions about technology integration and language learning.

- Using digital media resources helps students who learn a second/foreign language regard the language as real and accessible.
- Meaningful use of the digital media resources helps foreign language learners take charge of their learning and helps them to believe that their learning is meaningful and engaging.
- Using digital media helps students to learn how to communicate in the second language, as well as understand the relevant culture(s).
- Use of digital media helps foreign language learners explore meaningful usage of a second/foreign language with authentic materials and in authentic contexts.

3. Digital Media Projects

This section will detail how two students in my classes used digital media in their German learning over the course of two years.

3.1 Description of the Two Students

Student A joined my German class as a ninth grade student. Although an exceptionally hard worker, she tended to have some difficulties learning German grammar (she encountered similar problems with English), and often had quiz and test scores between the 75 and 85 percent range. She worked harder in comparison to many other students I had in the class, but had to make an effort to achieve scores in the 90 percent range. She went on to take German II as a tenth grader, and ended up with a final average of 87 percent. She ended up taking German III in the eleventh grade, and went on to complete the sequence in the twelfth grade (German IV). She completed both courses with 90 percent scores.

Student B also joined my first year German class in the ninth grade, but unlike Student A, she was ranked as one of the top students in her class. Due to this, she was consistently enrolled in the honors courses. She had been to Germany in the eighth grade, but had not achieved any formal instruction in the German language at that time. In general, her grades in the first two years were in the 92 to 96 percent range, and she won the academic award for top student in German each year. She was enrolled in German III during her eleventh grade year, and achieved a 94 percent score.

3.2 Student A's First Digital Project

Student A created her first digital media project with Windows Movie Maker as an eleventh grade student in the German III course. This project developed from a five week unit plan about music. During this time, the students became familiar with the history of music in Germany, learning about classical music by famous composers (e.g., Bach, Beethoven, Mozart, Brahms, Hindemith, Orff, and many others), as well as German rock music.

Student A made a music video of the Beatles's song: *I Wanna Hold Your Hand*, but used the German version of the song *Komm gib mir deine Hand*. The instructions for the video were to create an introduction to the song in German. Student A wrote her narration in German, and then had a head shot of her filmed as she read her narration. While a classmate held the text off camera, Student A was able to look into the camera while speaking. Her narration lasted one minute and five seconds with only her face on the screen.

The second part of her video lasted two minutes and 32 seconds. In this portion, Student A had imported the Beatles song into Windows Movie Maker (using the instructor's CD of the song), then added various pictures to the video while the song played. In addition, it was required for the students to produce subtitles of the song lyrics at the bottom of each picture, timed with the vocals of the Beatles. She was able to do this by using a feature in Windows Movie Maker *to* "make titles and credits," which had a "Subtitle" feature typing text into a text box, choosing a colored font (usually yellow, but she used various colors in the video), and then clicking "Done." When she was finished, Student A exported the complete video into Windows Media Video format, which could then be played with the program Windows Media Player on both a PC and a Mac.

3.2.1 General Assessment of Student A's work

The music video was Student A's first attempt to create a digital video with Windows Movie Maker. Due to her inexperience with the software and the conventions of film editing, some limitations of her technology skills were present. First, the opening shot of Student A's head lasted for one minute and five seconds, and most likely could have used some pictures in addition to herself. She also had some inconsistencies with her subtitles. Instead of choosing a uniform color, some of the subtitles were white, others yellow, others blue, etc. At times, some of her subtitles were difficult to see.

On the other hand, Student A was able to synchronize her music video portion easily. Many of the pictures she found (on the Internet) were relevant to the theme of the song. For example, many of the pictures included the four Beatles in various poses and at certain moments in their career (such as the appearances on *The Ed Sullivan*

Show). Other pictures showed two people together, often in poses with their hands clasped together. Some of the pictures included a bride and a groom together, a little boy and little girl together, but also a humorous picture with two men from the famous Apple commercials with one playing the PC and the other the Macintosh. In summary, she was able to achieve marks of "Meets Expectations" and "Approaching Expectations" on her technology work. (See Section 4 for description of these marks.)

In the use of the language, Student A was working with a song that was not originally written in German, as the song lyrics had been translated into German from the original English. Given that she downloaded a copy of the German lyrics from the Internet, her subtitles contained few errors. The consistent error she made was the phrase: "Ich will mit dir gehen" (I want to go with you), and the "mit" was actually the word "mir" (me).

Student A's main difficulty with the language was specific elements of speaking. I graded her content as "exceeding expectations" because she was able to find the history of the Beatles song, and how it happened that they performed the song in German during 1964. Student A had the most struggles with her fluency and pronunciation. For example, she had a tendency to speak slowly and carefully (especially when saying a year like "1964"), and often spoke with an umlaut when an umlaut should not have been there. She was also a soft-spoken person by nature who did not always show confidence in her speaking abilities. Because her face was visible during the first part of the video, the nonverbal features of her face showed definite discomfort, which ended up affecting her fluency. Her fluency and pronunciation marks were graded as "approaching expectations."

3.3 Student B's First Project

Student B's first video was a cooking demonstration that she created (along with help from her teacher) as a second year German student. Because she was in her second year, there were not specific technology guidelines assigned to this project. The primary focus of this project was to write up a recipe for one dish, then show how the dish was put together. After the writing portion was completed, each student was required to give an oral presentation on the recipe to be taped with the digital camcorder. In this presentation, the students were allowed to use note cards with some of the information printed, but they were not allowed to read the written text verbatim.

After the oral presentation was recorded on DV tape, it was transferred via FireWire to a Macintosh computer, where it was edited with iMovie. It was intended that the presentation would be saved in MPEG-4 (m4v) format so that one could watch it on an iPod with video capabilities. At the time, I had a version of iMovie that supported file conversion to MPEG-4 without having to buy an extra software program.

In this presentation, Student B created a dessert called "Peanut Butter Meltaway Cake." She brought all the ingredients with her to class, but already had a finished cake with her for the presentation. Because she had requested not to waste any food, she was allowed to use plastic egg shells for "Eier" (eggs) instead of using real eggs.

3.3.1 General Assessment of Student B's Video

Because technology skills were not assessed in this project (so that students could concentrate on their writing and speaking skills), the resulting vodcast of Student B only contained three edits: a still shot of the ingredients on the table, the live presentation (lasting three minutes and 30 seconds), and a final still shot of Student B holding the cake. Some subtitles were used in the vodcast. These subtitles included the title of the presentation, the ingredients used in the cake, and the phrase "Guten Appetit" (Good appetite!) at the end. In summary, a finished product was created, but it was not intended to show the student's technical and creative skills with the software. No grade was given, but a hypothetical technology grade for the project was 83 percent, with "approaching expectations" marks given for each criterion. (See Section 4 for details.)

In the assessment of the language, Student A was already the best student in the classroom, and already had established a comfort level speaking German. Because she had performed in front of people numerous times at the school, the oral presentation did not intimidate her.

She received "exceeds expectations" marks for her content, fluency, and vocabulary. She did, however, have an "approaching expectations" mark on her pronunciation. For example, she had a pronunciation error with the word "Margarine." Instead of producing a hard "g" in the word (German), she pronounced it with a soft "g" (American). On occasion, she had a tendency to drop adjective endings off of words. Beyond these problems, she earned "exceeds expectations" on the majority of her speaking criteria.

3.4 Second Digital Media Project

Both Student A and B created digital media projects from the unit: "Ein Wort im Deutschen" (A Word in German). The purpose of this unit was to familiarize my students with some words in the German language, and be able to talk about these words after some reflection and consideration. My intentions for this project was to help the students further enrich their vocabulary, be able to communicate more in spoken German, gain some exposure to more sophisticated content knowledge in the

German language, be able to reflect meaningfully on the words they encountered.

The unit began during November and commenced for a five-week period. Both Student A and B began work on their projects in the third week, and completed their projects during the fifth week, just before the December holidays. At this point, Student A and B were both one year older. Student A was in the twelfth grade and enrolled in German IV, while Student B was in eleventh grade and enrolled in German III. (Note: Both students were present in the same course because there were nine total students).

3.4.1 Student A's Second Video Project

Student A's project was called *Freundschaf*t (friendship). In her work, Student A offered a detailed analysis of the friendships she had made throughout her school years, and she wrote extensively about the six year friendship she created with her best friend. There was also a comparison of the meaning of friendships to Americans and Germans, giving the project a cross-cultural component.

3.4.2 General Assessment of Student A's project

Student A's performance with the technology elements was significantly better than the previous year. First, all of the pictures in the project were original material that Student A took herself. The subtitles on this project were all in yellow and in the same font, a significant improvement from the subtitles from the music video project. Once again, all the video, audio and subtitles were correctly synchronized. This time, Student A was able to use more visual effects, especially at the beginning of the video. She earned marks of "meets expectations" and "exceeds expectations" on the technology components.

Student A's greatest degree of improvement came on the language components of the project. First, she spoke German for nearly five minutes on this video, compared to just a minute on the music video. This time, Student A was able to form more complex sentences, including the use of relative clauses, which she had just learned in this unit. She was also able to use verbs with prepositional objects. She was also able to bring more detailed insight by describing her best friend and the meaning of friendships in the second language. Although she did make some pronunciation errors in her German, she achieved "exceeds expectations" marks on her entire language performance criteria, earning a 96 percent on the entire project.

3.4.3 Student B's Second Video Project

Student B's project had the title *Fremde* (strangeness, foreignness). In this presentation, the student discussed the concept of strangeness in her academic life, and also its relation to her performance on the soccer field, which was her favorite sport. She was also able to discuss the concept of foreignness in Germany, especially issues of immigration and the East-West divide after German unification in 1990.

3.4.4 General Assessment of Student B's Project

It was my general expectation that Student B would earn high marks on her language skills, given her successful academic history. She earned "exceeds expectations" on her content and sentence structure, given that she used more complex sentence structures and more difficult vocabulary in her presentation than from the previous year. She was able to use the subjunctive mood in this video, whereas this was not done the previous year because she had not learned the subjunctive. She also earned "exceeds expectations" marks for not only discussing the personal meaning of "Fremde," but also for her thorough discussion of "Fremde" in modern German history.

The most significant improvement in Student B's work was in her work with the technology. She had done one digital video prior to this one, but it only contained a small number of scenes where she and her classmates presented a puppet show. In this project, Student B had 25 to 30 edits with her pictures. She used a variety of pictures (mainly from the Internet) with thematic relevance to her content, such as university pictures and pictures from Berlin. Her most significant problem was synchronization. Many of her subtitles appeared on the screen for two seconds or less, not allowing enough time to read them. In comparison with the project from German II, she improved her skills in using the technology to a large extent.

3.4.5 Comparing Grades of the Projects

See Table 1 and Table 2, which show the point totals the students received on their projects from the two years they were in my classes.

From the data, we see that one year was significant for Student A based on her performance in the language as well as her technology skills. Her total average rose nine points, including a six point increase on her writing, a 12 point increase on her speaking, and an eight point increase on the technology components. By the time she had completed the second project, she had accumulated seven semesters of language study, and had been working with Windows Movie Maker for two years.

As for Student B, her scores on language ability did not change significantly, given she was already a successful student academically. Her technology score moved up from 83 to 93 in one year's time, given she had accumulated more experience with Windows Movie Maker during her eleventh grade year.

Table 1
Summary Grades from 2006 to 2008 in Student A's Projects

Student	First Project (2006-07 academic year)	Second Project (2007-08 academic year)
Student A	(out of 300 points) Writing portion 90 out of 100 Speaking portion 84 out of 100 Technology Portion 87 out of 100 Total: 261 out of 300 points = 87 percent	(out of 300 points) Writing portion 96 out of 100 Speaking portion 96 out of 100 Technology Portion 95 out of 100 Total: 287 out of 300 points = 96 percent

Table 2
Summary Grades from 2006 to 2008 in Student B's Projects

Student	First Project (2006-07 academic year)	Second Project (2007-08 academic year)
Student B	(out of 200 points) Writing portion: 94 out of 100 Speaking portion: 95 out of 100 Technology portion: 83 out of 100 (hypothetical) Total: 189 out of 200 points = 95 percent	(out of 300 points) Writing portion: 96 out of 100 Speaking portion: 96 out of 100 Technology portion; 93 out of 100 Total: 283 out of 300 points = 94 percent

In summary, we can see that the digital media projects helped the students gradually improve, although in different ways. Both students were able to improve their technology performance, while student A was able to improve her language performance through the creation of the projects.

4. Implementation Framework

In this section, I will outline a framework intended to help other language teachers integrate digital media into their language lessons with students. This framework is designed primarily for other high school teachers, given the context in which the projects were conceived. College instructors may also find this framework useful.

4.1 Technology Resources Needed

The basic requirements for these projects are PC computers (e.g., Dell) with the Windows XP or Windows Vista operating system. Windows XP and Vista have Windows Movie Maker bundled with the software, which is generally found by going to the "Start" menu, and then selecting "Programs" and then "Accessories."

In order to accommodate a potentially large class size, the teacher needs to have a computer laboratory, language laboratory, foreign language resource equipment or equivalent with the computers and operating system listed above. There should also be adequate support staff in this resource center in the event that computer problems arise. It is imperative, however, that the teacher understand how to use Windows Movie Maker and (s)he should create digital videos herself before using the software with the computers. It is recommended that the teacher attempt to find the time and resources necessarily to get formal training with the program, but that is not always an easy task to accomplish. In the absence of a formal workshop on Windows Movie Maker, there is an instruction manual on Microsoft's Web site at http://www.microsoft.com/windowsxp/using/moviemaker/default.mspx (Windows XP) or http://www.microsoft.com/windows/windows-vista/features/movie-maker.aspx (Windows Vista).

In addition to these resources, one college professor posted detailed instructions in how to put digital videos together. Although the professor uses a more advanced video editing program, his instructions are presented in a systematic, detailed manner. This instruction booklet (in PDF format) can be found at: http://www2.mcdaniel.edu/german/musicvideos/). If the educational setting has Mac computers, the teacher can still create digital videos using the program iMovie, which is bundled with the Mac OS X operating system. Please note that since the release of Mac OS X Version 5 (Leopard), the iMovie has gone some significant updates, the most important being a larger variety of video formats under which to save the finished videos. It also comes packaged with Apple's software iLife 09.

4.1.1 Notes on Video Formatting

When finishing a digital video, Windows Movie Maker requires the user to save the project to the computer's hard drive, a recordable CD, an e-mail, to send to the Web, or to a DV camera. Unfortunately, the software only allows the finished file to be saved in Windows Media Video format (.wmv). Although the finished file is easy to transport (such as a jump drive), it cannot, for example, be saved onto an iPod without extra software to convert the file.

4.1.2 Notes on Additional Resources

It is also helpful for a foreign language teacher to have the following additional resources on hand:

- Digital camcorder
- Digital camera (to take your own digital photos)
- FireWire
- Access to the Internet (using Internet Explorer, Mozilla Firefox, or equivalent)

A laptop computer with a built-in camera will allow the teacher and students to record the video and save it directly to the hard drive without an extra FireWire or digital camcorder. This will save time and will most likely prevent jerky hand movements often associated with handheld camera.

4.2 Training Time for the Students

It is most likely that a foreign language teacher will have students with varying technology skills. Some students will already know how to use Windows Movie Maker; others will have some to no working experience with the software. The most important aspect is that the teacher needs to model the software with meaningful uses and tasks that support a communicative language teaching approach. It is important that the teacher emphasize that the language and culture learning is most important, and not to let the technology dominate the projects.

A teacher should attempt to create at least one three minute project with the software to become familiar with its features and uses, and does need to devote some time (usually a half or a full day) to put a completed project together. Instructional time for the students generally takes a week before they begin working on their own. The teacher needs to be prepared that some students will require less time for preparation, while others will require more. In my experience, every student I have taught has been able to put together a completed project after an average of a week's instruction. If using a language resource center to create the videos, it is advisable to do progress checks of the students' work, as some students will claim they are working on the project at home, but do not necessarily produce the project on demand.

Arguably, the most difficult task with Windows Movie Maker is synchronization of the video, audio tracks, transitions, and any possible titles and subtitles. It is also likely that the students may need to make repeated attempts to make sure their videos are "in sync." For this reason, the teacher needs to ensure that a "first draft" video is created so that students can correct their language errors in addition to their editing errors.

Depending on the school context and availability of resources there, it is recommended that a time period of two to four weeks be used for completion of the project. This will also depend greatly on the language and technology skills of the students, as well as the size of the class.

4.3 Curricular Considerations

The teacher should already have a standards-based curriculum in place, given that most states already have standards for foreign languages (http://www.utm.edu/staff/globeg/flstand.shtml). It is also wise that the teacher have knowledge of the NETS-S standards to that any outcomes using the technology resources are outlined clearly.

Any digital media project of this type still needs a unit plan in order for the teacher to define objectives of lessons, as well as outcomes of the language and the use of technology. Although many materials already exist on designing lesson plans for foreign languages, a teacher can follow a basic framework such as one found on SIL International's Web site (http://www.sil.org/lingualinks/LANGUAGELEARNING/MangngYrLnggLrnngPrgrm/HowToMakeAUnitPlan.htm

Following SIL's Web site, the unit plan for a digital media project needs to have a framework, including the following elements:

- Objectives
- Techniques and Activities
- Resources
- Projected time frame
- Evaluation criteria

(http://www.sil.org/lingualinks/LANGUAGELEARNING/MangngYrLnggLrnngPrgrm/HowToMakeAUnitPlan.htm)

Five steps are also suggested in creating the unit plan.

- Review the set of objectives you have decided to base your unit on.
- Decide on the techniques and activities you will use to meet these objectives.
- List any resources you will need to carry out the techniques and activities.
- Decide how long it will take to do all the techniques

and activities.
- Decide how you will determine whether or not you have met your objectives.

Specifically, the objectives, techniques, and activities for the language learning need to be aligned according to the school, district, and state learning standards. Many of the learning outcomes needs to be tied to Communication Standards 1.1, 1.2, and 1.3, allowing students to communicate in the target language in interpersonal, interpretive, and presentational modes The technology outcomes need to match the language of the NETS-S standards, and may also need to match the school, district, and state learning standards, as well.

In general, I have found that a specific content area helps to define a unit plan, and thus develop the digital media projects. For example, my German II students have done the unit on food, and then created projects. One time we did a unit on animals, and their digital media assessment at the end of the unit involved describing an unusual pet in German, complete with pictures.

The German III and IV class has allowed me to introduce many content areas in addition to music for the music videos, and German words for the *Ein Wort im Deutschen* project. For example, German films have given me the opportunity to teach engaging content, and then have the students produce digital videos. During one year, we watched the 1987 film, *Wings of Desire*, following the lead character, an angel, in his pursuit to become human. The digital video the students put together was a sequel to the movie, conceived by the students themselves.

In general, most of the units I have used in my German classes have been from a minimum of three weeks to a maximum of five weeks long. Digital media projects generally extend the length of the units from four to five weeks, given that students require time for filming and editing their projects. The digital media projects are usually begun at the beginning of the third week, giving students about three weeks time to complete their work.

4.4 Assessment Rubrics

In designing a rubric to assess the projects, the projects are generally designed to be worth 300 points. A hundred points are given for the writing of the language, 100 points for speaking, and 100 points for the use of the technology in the projects.

The criteria used to assess writing are the following:

- Content
- Language control
- Grammar
- General organization of ideas

The criteria for the speaking portion are:

- Content
- Language control
- Delivery
- Pronunciation

The criteria used to assess technology use are taken directly from the NETS-S standards:

- Basic operations and concepts
- Handling of social, ethical, and human issues
- Use of technology productivity tools
- Use of technology communications tools
- Use of technology research tools.

The four grade levels used to assess language and technology use outcomes are:

Level Four = Exceeds Expectations
Level Three = Meets Expectations
Level Two = Approaching Expectations
Level One = Needs Improvement

“Needs Improvement” means that little to no evidence has been demonstrated that a student understands a concept or that proficiency in the language has been reached.

“Approaching Expectations” means a student is showing limited proficiency in a language or some level of understanding of concepts. The standard of understanding of acceptable proficiency level has not yet been reached.

“Meets Expectations” means a student has shown acceptable proficiency of a language, or has shown acceptable understanding of a concept.

“Exceeds Expectations” means a student has shown exemplary understanding of a concept or has shown proficiency in a language that has reached advanced levels (in relation to earlier novice and intermediate levels).

Detailed written descriptions of the performance levels are then written out for each criterion, and students are given these after each project is completed and evaluated.

It is important that a teacher not only have adequate technology resources and a curriculum framework that conforms to national and state language standards, but also a supportive administration. It is recommended that teachers save a copy of digital media projects of their students’ work and show them to a principal or administrator as a method of showing the result of the work done in class. It is definitely important to have a product to show, especially when a teacher is being evaluated.

4.5 Copyright and Safety Concerns

It is important that students understand that they must give proper citation credit if they use materials that do not belong to them. In general, Student A and Student B included a credits page at the end of their videos whenever they used images from the Internet they did not create.

In a high school context, most of my students either saved their videos on a jump drive, to their iPods, or burned the videos to a DVD. Students are not required to upload their videos to the Web because our school did not have a streaming video server, and Web sites such as YouTube and Facebook were blocked. Although students could have uploaded their videos from home, it was important to review with students the responsibilities one must deal with when uploading video to the Internet.

5. Implications

Prior to the 2006-2007 academic year, it would not have been possible to integrate digital media projects into the curriculum and my classroom practice because the school did not have adequate resources. Beginning in the fall 2006, the school updated its computer laboratory with new PCs, and all of have them had Windows XP operating system installed, which included Windows Movie Maker. With the installation of new computers and software, it had a significant impact for the German program at my school.

There was a significant improvement in the class averages in the German II, III, and IV courses over a three year period, beginning in 2004 and ending in 2008. The data table below shows the improvement.

Table 3
Final Grade Percentages for German classes from 2005 to 2008

Class	2005-06 year (No digital media assigned)	2006-07 year (First year for digital media projects)	2007-08 (Second year for digital media projects
German II	78 percent	83 percent	88 percent
German III	90 percent	92 percent	95 percent
German IV	91 percent	94 percent	95 percent

The data show that there was significant improvement in performance for the students over this three year, culminating in the highest numbers during the 2007-08 academic year. The German II percentages were lower because many of the students were required to take two years of German, and some of them were unable to achieve the highest performance scores. German III and IV, however, were voluntary electives, and often included the most academically successful students in the school. Student A, however, did not achieve the highest marks in many of her courses, yet she was able to achieve academic success in four years of German.

Given these results, it is possible for other foreign language teachers to integrate the use of digital media in their curricula and in their classroom practice. At our school, digital media projects helped the students to improve their performance in a foreign language, they helped our students to engage in meaningful learning contexts, and the students were also able to use the school's technology tools in creative, meaningful ways. The projects also helped students to feel motivated about their learning, and spurred them to achieve better academic performance.

In summary, doing this project was essentially a collaborative effort by both my students and me. Following the foreign/second language literature, I followed the advice of authors that it is teachers and student who are ultimately the one who integrate technology to improve language skills and improve cross-cultural understandings (Travieso-Parker, Shrum, and White, 2007). In addition, our project echoed the sentiments of Garrett (1991) and Moore (2006) that successful use of technology "depends on the teacher's choice of activities and tasks that demand collaborative work, as well as the teacher's conviction that language and culture are inseparably integrated" (Moore, 2006, p. 591). Of course, I have to give much credit to my students for believing in the project and motivating themselves in such positive ways to create these innovative projects.

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