

Feasibility of Students Using Presentation Software in University English Communication Classes

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Abstract

Students using presentation software is a new computer-aided language learning (CALL) approach for the teaching of EFL speech-making. This paper documents a two-semester study of an initial trial of teaching presentation skills to 194 Japanese university students, the majority being first year non-English majors in a required general education, foreign language course. Three instructors taught PowerPoint-based speech-making in seven different classes, using a variety of instructional approaches. In six classes a presentation assignment was a major project (20-40% of grade) and in one class presentation-making was the sole focus of the lessons. Technical problems were listed concerning software and hardware adaptation. Finally, a 25-item student questionnaire elicited the students' assessment of the program. The authors conclude that technically-inexperienced instructors should expect time consuming adjustments compared with traditional speech-making instructional approaches. Student responses, however, were fairly positive and indicated that presentation software is not only feasible for EFL instruction, but also carries a number of promising advantages.

大学英語コミュニケーション授業におけるプレゼンテーションソフトの利用可能性

パワーポイントのようなプレゼンテーション用ソフトを学生が利用する学習方法はEFL (外国語としての英語教育) におけるスピーチ学習にとって新たなコンピュータを活用した学習方法 (CALL) である。この論文は今年度前期, 後期に渡って194名の日本人大学生を対象に行われたプレゼンテーション技能指導に関する研究成果である。対象となった学生の大部分は必修の英語を履修している英文科以外の一年生である。3名の教員がパワーポイントを利用した発表のための授業を展開し, 7クラスで多様な教授法を用いて指導した。6つのクラスではプレゼンテーションの課題が評価の20%から40%を占める重要なプロジェクトであり, もう1つのクラスではその課題が授業の唯一の中心的課題であった。ソフトとハード利用に関する技術上の問題は一覧表となっている。最後に, 25項目からなるアンケート用紙はこのプログラムに対する学生の評価を明らかにしている。著者の結論としては技術的に経験不足の教員は伝統的なスピーチ指導法と比較して時間的な負担を覚悟しなければならない。しかしながら, 学生の反応はかなり肯定的であり, プリゼンテーション用ソフトの導入はEFL 授業にとって有効であるばかりでなく, 将来に期待を抱かせる利点が数多くあることを示していた。

I. Introduction

Making oral presentations in English has been common practice in language classrooms for many years. Recently, textbooks such as Harrington and LeBeau (1986) are encouraging broader applications of speech-making skills to focus on international business presentations. Whereas in the past, rhetoric and storytelling were the key elements of speech-making, more visually-oriented presentations are increasingly becoming the norm. Garmston and Wellman (1992:66) claim that one of the speaker's tasks is to "activate the knowledge, skills, and experiences of audience members". One way to do this is to stimulate the participants' visual, auditory, and kinesthetic senses. The use of visuals in particular has been strongly recommended, since on average, only 20 percent of an audience has sufficient auditory processing skill (Garmston and Wellman, 1992:66-67).

To aid participants' understanding, speakers have relied on overhead transparencies, posters, whiteboards and cardboard drawings to stimulate the visual sense. While these visual tools can be effective, they are often poorly or inadequately designed. This is frequently due to the speaker's lack of knowledge regarding design and/or poor artistic skill. Instead of complementing the content of a presentation, the visuals may detract from its effectiveness. Moreover, the time-consuming nature of creating paper or OHP visuals usually means that presenters often omit these tools, especially if the visuals are to be used only once and discarded. With the advent of presentation software, problems of ineffective visual design have been greatly reduced. Presenters are now able to conveniently generate slides with three-dimensional graphics, flow charts, video, sound and more. Furthermore, visuals can be saved, reused and revised, thus reducing time and improving quality in creating subsequent presentations.

The potential for implementing presentation software has recently become practical with university computer classrooms providing "office suite" software that often includes a presentation module at no additional cost. Many colleges and universities in Japan possess presentation software such as PowerPoint, as part of the Microsoft Office software package, for example. Since PowerPoint and other presentation software can be used multi-lingually, it would seem ideal for adaptation to foreign language communication classes, which often teach oral presentations. Whether using such presentation software is practically feasible and instructionally appropriate for students learning a foreign language is thus the major question this paper addresses.

II. Review of Research on Student Presentation-making

To justify the appropriateness of presentation software instruction, this study first reviews

background literature on: a) the role of oral presentations in language learning, b) the importance of visuals in presentation-making, c) the value of presentation software to enhance speech-making, d) the use of PowerPoint software in EFL classrooms, e) the reluctance of teachers to use presentation software, and f) the resulting research aims of this study.

A. Oral Presentations in Language Learning

Making oral presentations in English has been common practice in language classrooms for many years. By doing oral presentations in front of a camera or a live audience, students learn how to connect with the receiver through the use of multiple forms of input (Garmston and Wellman, 1992: 66-68) . These multiple forms of input (visual, kinesthetic, and auditory) are all used to convey a message to the receiver so that it can be easily understood. Since good communication usually involves sending and receiving messages (information) effectively, an oral presentation is a useful skill that language learners can exploit in their quest for communicating successfully within the target language.

Language learning is most effective when students have an opportunity to use language for real purposes. When students prepare and then give an oral presentation, they are engaging in a purposeful activity. An oral presentation requires the presenter to search for information, process it, and then to share it with others. The entire process results in “the sharing of the created product with others, which serves as a springboard for meaningful interaction” (Schcolnik and Kol, 1999:2) .

B. The Importance of Visuals for Making a Presentation

As mentioned earlier, to make a successful presentation, presenters must use multiple forms of input. One of the speaker’s tasks therefore is to “activate the knowledge, skills, and experiences of audience members” (Garmston and Wellman, 1992:66) in order to provide the audience with the richest possible learning environment. One way to do this is to stimulate the participants’ visual, auditory, and kinesthetic senses. The use of visuals in particular has been strongly recommended, since on average, only 20 percent of an audience has sufficient auditory processing skill (p. 66-67) . A presenter’s major concern should be the receiver’s comprehension of input, and therefore it is important to strengthen the effectiveness of other sensory inputs. Since well-designed visuals aid the audience in remembering major points (Mausehund and Dortch, 1999) , presenters should hone their skills in this area. One way to do this is through the use of presentation software.

Presentation software programs allow users to create visually stimulating on-screen multimedia presentations or overhead transparencies. Different types of presentation software are available:

Adobe Persuasion, Hyperstudio, Gold Disk Astound, Deltagraph Pro and Microsoft PowerPoint (McClelland, 1994) . Of the presentation software that is available, PowerPoint remains the most popular in use (Caughlin, 1999) . Presentation software offers a unique blend of color, animation, graphics, sound, video, etc., to accommodate a variety of learning styles (Provenzo, Brett, and McCloskey, 1999) . Its main strength lies in its “slide show” design, which makes the organizing of information a fairly simple task.

C. Presentation Software Use in the Language Classroom

The slide show structure in itself makes presentation software a desirable tool, since organizing and presenting information is a skill many foreign and second language students have trouble with. Presentation software can also transform students from passive learners to active learners (Siegle and Foster, 2000) , and facilitate the development of research skills, cooperative learning, and problem solving (Sharp, 1996) . Jonassen, Peck and Wilson propose that “students-as-producers-of-technologies engage in more meaningful learning than student-as-receivers-from-instructional-technologies” (1999:112) .

Through the use of presentation software, students are forced to clarify their topic. In a study of native speakers of English, Schenone-Stevens (1996) found that visuals are usually designed more effectively and ideas more clearly understood when done with presentation software (due to the organization of content in slide format) . This study further tested the effectiveness of PowerPoint presentation software in the class, where students’ speeches were found to be more interesting to listen to; students were more involved with their presentations; and presentations were more visually stimulating (p. 5) . In addition, Schenone-Stevens also found that students considered PowerPoint an invaluable tool for organizing content and that students with or without computer experience could use it easily (p. 6) . In addition, another study of native speakers by Scholnik and Kol (1999) found that students derived great satisfaction creating presentations with PowerPoint and were motivated to invest time and energy into the quality of their presentations.

With computer presentations, students can include photos, animations, colored fonts, graphs and charts. In other words, students’ resourcefulness and creativeness come to the forefront. In this way, students are able to take advantage of differences in the way they express themselves. Scholnik and Kol also found that PowerPoint lets students produce an esthetic piece of work even at very low levels of language proficiency (p. 3) . The slide show layout allows learners to use simple English while retaining a professional look and feel to the presentation. By choosing their own background design, graphics, colors, etc., students are able to express themselves in a way they feel comfortable with.

Scholnik and Kol also confirmed a further value of computer presentations in that students can revise their slides easily, which gives them extensive exposure to the content of the presentation. This in turn helps them remember what they want to say and gives them more self confidence (p.3) . Through observation, they determined that this revising process helped students remember what they wanted to say and gave them more self-confidence (p.3) . In addition, 80% of the students surveyed in the study (n = 67) said that PowerPoint allowed them to change their presentations easily and to make revisions. Presentations aided by computers also seem to help students minimize tension and a feeling of insecurity when having to speak in English (p. 3) . Fifty two percent (N = 67) reported that PowerPoint helped them improve their English while 48% said it did nothing to improve their English. Some students mentioned that the time spent trying to learn PowerPoint would have been better spent working on the content of the presentation.

D. Use of Presentation Software in Foreign Language Instruction

Although some teachers have found ways to employ presentation software in their classes (Schcolnik, 1999; Peterson, 1999) , a majority of educators seem to prefer using it as a medium for enhancing lectures (see Creed, 1997 and Daniels, 1998 for a review of using presentation software to aid instruction) . The actual use of the software in foreign language teaching has yet to be fully explored (Atkins-Sayre, Hopkins, and Mohundro, 1998; Siegle and Foster, 2000; Znamenskai, Guan and Young, 1999) , particularly concerning the students' use of presentation software within the classroom setting.

A pilot study conducted by Atkins-Sayre, Hopkins, and Mohundro, concluded that students had a desire to see PowerPoint technology used in many of their classes and 67% expressed interest in utilizing the technology themselves in the classroom. Although the study was limited (small control group) , it was concluded that the use of PowerPoint in the classroom needed to be explored more fully.

In a paper based on teachers' perception of the use of PowerPoint in the classroom, it was found that the teachers in the study experienced conceptual changes in their perceptions of PowerPoint: from it being a tool for teachers to it being a tool for students (Znamenskai, Guan and Young, 1999) . However, the authors reported that more research was needed to determine the levels to which PowerPoint could be applied in the classroom.

Siegle and Foster (2000) were interested in determining whether exposure to presentation software influenced student achievement. They concluded that students learned more when they created projects with presentation software. Their study, however, raised a question as to whether or not the computers rather than the software contributed to the positive outcomes resulting from

the use of computers/presentation software used in the classroom. The authors recommended further study to investigate the impact of PowerPoint and its effect on learning (p.11) .

In a previous paper, Bossaer, Hinkelman, and Miyamachi (2001) reported on the technical problems associated with introducing presentation software into four classes which included speech-making instruction. In this paper, those findings are expanded to include instructional descriptions and student responses in seven different classes with varying levels and majors. However, despite the availability of presentation software, in the past five years there have been no other significant studies on EFL student-created presentations using software tools. An internet search which found over 100 articles on the use of PowerPoint surprisingly had none on EFL student presentations, the majority focusing on teacher-use of PowerPoint or offering manuals and guides for self-training.

E. Why Many Educators Avoid Presentation Software in the Classroom

One reason presentation software has seen limited use in the classroom is because many teachers have little understanding of the educational value of computer presentations. In one study aimed at finding out teacher conceptions of PowerPoint presentation software, it was found that teachers only had a superficial conception of PowerPoint. Things like “eye appeal”, “colors”, “photos and images” were emphasized (Znamenskaia, Guan, and Young, 1999:25) .

Other reasons for the less than enthusiastic response to using software and computers in general in the language classroom vary, but the contention that teachers shy away from technology they perceive as being time-consuming (Herschbach, 1994) , seems valid. It is also presumed that working with computer software can be very demanding and frustrating and there is a general feeling that teachers must have a working knowledge of computers (Hurn and Thibeault, 1996; Huang and Liu, 2000) . Furthermore, students may reject technologically-enhanced teaching if they cannot successfully (quickly and easily) master the software being used. As Huang and Liu state, “The student’s difficulty of manipulating software usually undermines the student’s interest in the class” (p.2) .

Although some teachers have found ways to employ presentation software in their classes (Schcolnik, 1999; Peterson, 1999) , a majority of educators seem to prefer using it as a medium for enhancing lectures (see Creed, 1997 and Daniels, 1998 for a review of using presentation software to aid instruction) . The use of presentation software for language teaching, particularly as a learning tool for students, has yet to be fully explored and research into the effects of presentation software on learning has been called for (Atkins-Sayre, Hopkins, and Mohundro, 1998; Siegle and Foster, 2000; Kincaid, McEachron and McKinney, 1994; Znamenskaia, Guan, and Young,

1999) .

F. Research Aims of this Study

Given this research background, this paper aims to determine whether general foreign language education classes in a typical mid-level Japanese university can adopt presentation software as a tool for EFL instruction. The first question concerns how the software and hardware need to be adapted to fit these teaching conditions. Secondly, how were the classes taught and how did the instructors evaluate their own instruction? And thirdly, what were the student responses to the projects assigned and their self-assessment of the value of the program?

The following section describes the research method and student participants in seven classroom situations where presentation software was used, followed by sections on each of the three research aims: software/hardware adaptation, instructional approaches, and student responses.

III. Method and Participants

An action research approach was used, whereby three instructors in a university general English program applied PowerPoint software to specific projects in their respective classroom situations (seven classes, 194 students) . Each instructor designed their own approach to applying the software to best serve the overall objectives, interests and levels of their classes. Individual instructor self-reflection was used as data for documenting the first two research questions (software/hardware adaptation and instructional application) while a 25-item questionnaire was used to assess the student responses.

During the April-July semester of 2001, at a university in northern Japan, four classes of undergraduate oral communication, comprised of a total 76 students were taught to use PowerPoint and deliver presentations of 5-15 minutes long. The two instructors were both native speakers of English and the classes were conducted almost solely in English.

During the September-December semester of 2001, at the same university, two of the four classes continued projects using PowerPoint, two classes did not continue into the second semester, and three new classes were added to the program. Two of the new classes had the same level of students but were taught by a native Japanese-speaking instructor of English. Both Japanese and English were used by this instructor in the PowerPoint training. The following chart summarizes the number of students and teachers involved in this study.

Figure 1: Teacher and Student Participants - English PowerPoint Presentation-making

	Number of students n=194	Major/Department	Semester	Year	Instructor	Instructor's Native Language
Class 1	42	Psychology (required)	1,2	1	D.H.	English
Class 2	13	English (required)	1	4	D.H.	English
Class 3	7	All majors (elective)	1	3,4	D.H.	English
Class 4	17	All majors (elective)	1,2	1,2	A.B.	English
Class 5	31	English (required)	2	1	A.B.	English
Class 6	42	Psychology (required)	2	1	S.M.	Japanese
Class 7	42	Psychology (required)	2	1	S.M.	Japanese

IV. Software/Hardware Adaptation

Inevitably, the equipment used in classroom-based research must follow what is already available in the school. If readily-available computer lab equipment, common to all universities, can be used for this presentation-making project, then there could be wide-ranging applicability for this experiment. A "typical" computer room or CALL laboratory in Japan would probably include the following specifications:

- Windows OS (version 95, 98, NT or 2000)
- PC computers for each student connected to a network, with a shared folder
- Office suite of software, including a presentation package such as PowerPoint
- Projector and space for giving presentations

In this case study, all of the above were available to the students with the exception of the projector which was available only for classes of 20 students or less. Thus, the larger psychology classes were handicapped with brief demonstrations in the projector room, and had to use other larger classrooms without a projector to compose their presentations.

However, despite the availability of most equipment, many adaptations were required in handling the software and hardware. By being aware of specific problems with typical computer lab equipment, teachers can avoid major problems. Nevertheless, teachers should be prepared for software and hardware glitches when they occur. Five major areas of concern that teachers should anticipate are described below:

A. File Saving

PowerPoint files tend to be well over one megabyte in size, larger than a typical floppy disk. This makes the locations for saving difficult for students to find. For example, some students

did not know how to save to their personal network folder, saving to the local hard disk instead. Unfortunately, all files saved there are automatically deleted upon daily shutdown and those students lost hours of work. CD-R drives using CD-RW disks were also a possible storage solution, but saving procedures were lengthy, and experienced occasional crashes. Furthermore, CD-R drives were not available in most of the computer labs on campus. Finally, a teacher who used an English Windows98 OS was not able to read the file names of students who named their files in the Japanese mode of romaji input, (only Japanese versions of Windows could read the names) . The recommendation for these problems is to increase the amount of instruction time for students on how the network works, how to save work and where to save it (see following points) .

- a. Save daily to a personal network folder.
- b. Set up a group, class, or teacher-shared folder on the network for students to deposit files.
- c. Save daily to that shared folder for backup, presentations, and teacher review.
- d. Save at the end of the semester to a CD-R disk and delete all copies of files on the network.
- e. Save all files as "*.ppt", the default file type (other file types may increase file size) .
- f. Name the files with the input method set on English roman characters, not Japanese *romaji*.

B. Photo Importing

The first problem in our setup was that there were no scanners available for student use. Using a single scanner (teacher's computer) created a bottleneck during weeks where students had to prepare self-introduction presentations using personal family photos. Teachers were forced to do all the scanning or monitor selected students using the teacher's scanner. After scanning, the photo files were placed in the shared folder. The second problem was that when students imported the photo files into their presentation file, they often used a drag-and-drop method to insert the photos. This is an intuitive method similar to what they learned when moving blocks of text. However, this method converts the compressed JPEG photo file into a bitmap file almost ten times the original size. One student who imported 30 photos into PowerPoint ended up with a 250 MB file. This size file took up to ten minutes to load and using this procedure slowed the whole school network. Recommendations are as follows:

- a. Set up multiple scanners for student use in computer laboratories or other public areas. (these computers need not be on the network as photo files can fit on floppy disks) .
- b. Import all photos and graphics using the "Input – File – Picture – Photo" command.

C. Video Taping

Students who taped their presentations sometimes found no audio on their tapes. This was due to the makeshift video recording system we devised in order to do direct VHS tape recording. The microphone once did not have adequate battery power, and other times the connector into the portable camcorder worked intermittently. Later we removed the microphone and relied solely on the built-in microphone on the camcorder (which had a weaker reception). Another problem was the tape-recording going blank in the middle of the presentation. This is because a camcorder needs to record to an internal tape while it sends an external signal for taping. Often the tape ran to the end and the recording would automatically stop. In addition, the complicated set-up required numerous connections to make and buttons to turn on for proper recording. This required over 20 hours of out-of-class teacher supervision for the teacher of one 42-person class that did two taping sessions. The recommendation is to make a self-access video recording studio for PowerPoint presentations with the following criteria.

- a. Direct to VHS recording (older cameras can do this) .
- b. Built-in directional microphone (a directional microphone can pick up sounds at a distance) .
- c. Overhead, permanent projector with spotlights.
- d. Simple arrangement with five or fewer switches and buttons for students to turn on.

D. File Transfer

When students were ready to record their presentations, the files were too large to carry by floppy disk to the recording studio. The teacher had to copy them from the shared folder to an MO disk and carry that disk to an MO drive connected to the studio laptop computer. This led to an overloaded circuit where eight different devices were connected to one electrical outlet. Recommendations are as follows:

- a. Set up a permanent computer in the recording studio.
- b. Connect that computer to the school-wide LAN with access to the shared class folder.

E. Software Instruction

On the campus where this study was conducted, only one of the seven computer laboratories had a projector for the teacher to do on-screen instruction of computer operations. This made it almost impossible to visually teach basic functions and file-saving operations. In three of the above class situations, the teacher had to verbally explain many operations, a complicated process which resulted in student confusion and some of the above mentioned problems. The primary recommendation is:

- a. Install and use a projector for the teacher's computer for teacher instruction on software use.

With the above recommendations, preparation and recording equipment can be operated easily by students, thus ending the out-of-class time requirement of teachers. Teachers can focus on teaching communication skills rather than monitoring equipment failures. As for the quality of presentations, the growth in English ability, and the motivation of students in using PowerPoint software, future research must address these questions. However, data gathered through informal teacher observations showed high levels of enthusiasm on the part of students, and a growth in confidence in students for learning both a valuable IT skill and a speech-making skill.

The employment of a separate video-taping room for recording and/or viewing presentations is necessary for lowered teacher administration time. If designed to be a self-access room, it will enable learning to take place independently of teaching, and for students to evaluate their own presentations and their peer's. While some teachers may fear the thought of relinquishing control, self-access is not intended to replace teachers or teaching. Instead it complements classroom learning (Sheerin, 1989, p.3) , and cuts down on the enormous time required for teachers to assess individual presentations.

V. Instructional Approaches and Reflection

The following describes the instructional approach used by each instructor in each of their classes. These descriptions include points about the course purpose, textbooks used, projects assigned, rooms/equipment available, number and level of students, hours and types of instruction, laboratory layout, and procedures of homework and grading.

Class 1: First Year Psychology Majors

This class was a compulsory general English class consisting of 42 first year clinical psychology majors. The students' English level was higher than the average non-English major. In the first semester, the class lessons focused directly on speech-making using the text, *Speaking of Speech* (Harrington and LeBeau, 1996) . Over the whole semester, students received approximately 20 hours of instruction in class (thirteen 90 minute lessons) of which 10 hours were spent on presentation skills, 5 hours on computer/PowerPoint operation, and 5 hours on other oral communication activities. During this time students were assigned to make two presentations, each 3-5 minutes long. The first presentation involved students introducing themselves, their families and their hometowns. The second one required students to introduce a topic in clinical psychology of personal interest. A minimum of ten slides was expected for each presentation, including personal scanned

photos, Internet photos, a graph, a table, and word lists. Students worked in a large computer laboratory without a teacher's projector, and learned PowerPoint software essentially on their own with minimal assistance. For the first presentation only, the students practiced the presentation before a partner in front of their computer screen. As graded exercises (50% of semester grade), both presentations were recorded on VHS tape in a separate recording studio and taken home for self and partner-evaluation. The teacher supervised the out-of-class recording.

In the second semester, the students changed to a different textbook covering intermediate-level conversation skills. In addition, they began an e-mail exchange program with a sister class of EFL students in Mexico. Each student was asked to send five or more e-mail messages to their assigned partner over the course of two months. After the e-mail exchange, the students were asked to make a report on their exchange using PowerPoint as an individual project for 30% of their semester grade. Each student had to prepare a 3-5 minute presentation comprised of 8-12 slides on the main topic, "Mexico: Introducing the Country and My Partner". They were asked to summarize the five topics of their e-mail exchange: 1) personal introduction, 2) music, sports, movies, 3) education system, 4) family lifestyle, and 5) thinking and feelings of Mexican people. Some students who were not able to get replies from their partner found a partner from another country and summarized that culture/partner instead. All 42 students were able to give their presentation in English for at least 3 minutes, recorded in front of their partner in a separate recording studio. The recording equipment was simplified so the teacher was not needed to supervise the actual recording, which required 12 hours over 3 afternoons. In reviewing the video tapes, the teacher was impressed with the students' efforts, and noted positive expressions on their faces upon completion. However, the instructor was also disappointed that roughly two-thirds of the students read their presentations from notes or from the text displayed on the screen. A more explicit set of guidelines could have prevented that. Otherwise, students demonstrated that they could organize their presentations well, with introductions, conclusions, topic transitions, gestures, simple text animations and various visuals. Less than 5% created tables, charts, or other advanced visual aids. In the second semester, no speech-making lessons were held except for a 30-minute review of the key points learned in the first semester. Thus, the quality of the presentations was generally lower than in the first semester. This might have been avoided by giving more explicit instructions and requirements for the students' final project.

Class 2: Fourth Year English Majors

This class was a seminar class of 13 English majors who selected intercultural communication as their topic of research. All students had traveled abroad in school-related programs and

made reports on their homestay and study abroad experiences. They received about one hour of instruction in organizing a presentation and then were given six hours of class time to prepare their presentation software without teacher assistance. A few students who were already familiar with PowerPoint taught their classmates. They were assigned to prepare one 15-minute presentation consisting of at least 30 photos and other slides. The presentation was recorded out of class on an 8mm camcorder. All presentations ranged from 13 minutes to as long as 30 minutes. The slides consisted of personal photos with some added maps and data from the Internet. Each photo slide had a text caption, usually displaying key words, not sentences. In the following month, each student had to write a report which formally summarized their cultural exchange experience. Thus, the PowerPoint report was one step in the overall course design.

Although all of the students were fourth year students, most had had no experience in using PowerPoint (instruction in the use of this software has now been added to the general education curriculum) . Of all the classes, this class experienced the most technical problems, especially with files. Many students lost whole files due to improper file-saving procedures. Three or four students had to remake their PowerPoint presentations after completing up to 80% of the slides. Although not for certain, it appears they did not save the final version to their personal file folder, or the saving process was corrupted due to the large file size. The latter was definitely a problem with most students possessing files well over 100 megabytes (in fact, one student's presentation file reached 230 megabytes) . Thus, opening and saving files was time-consuming, to the point that computer center personnel complained of problems of the overall network handling this file size. It took over three months to determine that the oversized file problem was due to the photo importing procedure. Students who imported photos via a drag-and-drop method caused the photos to be converted to huge bit-map images. Given a 30-slide assignment, the file sizes became unmanageable.

Class 3: Third and Fourth Year Various Majors

This class was an optional, intermediate level English conversation class open to any major. The seven students spent 5 hours learning presentation skills with the *Speaking of Speech* textbook and 7 hours preparing self-introduction presentations in a computer laboratory. They were assigned to prepare one self-introduction speech using photos and other visuals for a 5-minute, 10+ -slide presentation. Speeches were recorded in the same computer laboratory during class time. Twice during the semester, visiting students from Korea and the USA came to the class and each class member gave a self-introduction using PowerPoint. These informal presentations were made one-on-one in front of a computer screen, and conducted in a more conversational

style as the visitors often interrupted with questions. Of all the classes in the study, this class experienced the least amount of instruction due to the fact that most students were already familiar with PowerPoint. The conversation textbook used in the second semester included a chapter where students interview a partner, and then introduce their partner to the class. In the future, PowerPoint could be used as a visual organizer to enhance these presentations.

Class 4: First and Second Year Various Majors

This class was a seminar class of 17 students. A vast majority of the students had some prior knowledge of computers, although, much of it limited to basic word processing and Internet surfing. The theme of the seminar class was making oral presentations using PowerPoint presentation software. Class time focused more on utilizing the presentation software (approximately 28 hours) and less on speech-making skills (6 hours). An additional 4 hours was spent on activities related to resource acquisition via the Internet. During this time students were assigned to do five presentations, each lasting anywhere from 2 to 10 minutes long. Presentations generally got longer as the course progressed. The first presentation involved students introducing themselves, their families and their hobbies (6 slides). The second involved students incorporating graphs and charts to explain data (6-10 slides). Data came from in-class surveys designed by the students (e.g. The study habits of students in the class). The third involved choosing a country of interest (other than Japan) and giving ten reasons why other students should visit that particular country. Twelve slides were required including a cover slide (outline) and a bibliography. Slides could include personal photos, Internet photos, graphs or charts, or any other suitable graphics. Students were also required to set time transitions, make the show self-running and manipulate the custom animation function. The fourth presentation had students create a moving slide show (objects in the presentation continuously moved). This involved more advanced processes and students were not required to make a presentation, per se. Instead, students had to stand up and tell the class what they created and how they did it. The final presentation involved students pairing up, interviewing each other and creating presentations based on this information. The number of slides was unlimited and students were expected to use many of the techniques they learned throughout the year. The breakdown of the grading was as follows: 60% on technical skills/40% on speech-making skills. After students completed the technical side of their presentations, 2 classes (180 minutes) were devoted to speech-making (gestures, posture, eye-contact, voice level, and timing). Students worked in a multi-media room, equipped with one scanner (connected to the teacher's computer) and a CRT projector. Almost all instruction was done via the projector (step-by-step instruction shown on the teacher's computer). The third presentation

was recorded on VHS tape in a separate recording studio and taken home for self and partner evaluation. The teacher supervised the out-of-class recording. The class itself seemed enjoyable (see questionnaire results — Table 11 — Class 5) , yet the instructor encountered hardware and software problems. For example, it had been hoped that students would create PowerPoint presentations using the multimedia functions available in the PowerPoint application (e.g. video and sound) , but hardware restrictions made it impossible. Though the computers had sound cards, the drivers to run them were not installed. Previous software/hardware contracts between the university and computer provider prohibited modifications. Thus, sound was not available the entire year. The use of video was also out of the question as the computers had “built-in” programming designed to impede the use of any multimedia device (including digital cameras and video cameras) . Furthermore, this “built-in” programming would not allow installation of video-editing or digital-editing software. This was unfortunate as students were hoping to learn how to use sound and video. The restrictions with multimedia hardware and software was the only disappointment the entire year, but since this class is basically an advanced class in the use of PowerPoint, it is a problem that hopefully can be alleviated before being taught again.

Class 5: First Year English Majors

This class was a compulsory general English class consisting of 31 first year English majors. The students' level could be classified as high beginner/low intermediate (English as a Foreign Language) . Motivation to learn English was generally higher than most classes of non-English majors, though levels of intrinsic motivation are unknown. The focus of the class was on basic conversational English. Students were required to perform role-plays, skits, interviews, and oral presentations throughout the year. In the second semester, a PowerPoint oral presentation was assigned to each student. The teacher wanted to see how easy (or difficult) it would be for students to create 5-slide presentations with clip art graphics. He also wanted to see how students would fair with a computer-based presentation. Due to time restrictions, personal photographs were not used (since this would require the use of a scanner- a time-consuming option) . Furthermore, by keeping the number of slides fairly small, it was thought that each presentation would fit on a floppy disk, making it easier to transfer files later on. All thirty-one students were taken into the computer lab and assigned a desktop computer. Since all university students have their own access number, the students were able to boot up the computers without guidance. Instruction on how to open up the PowerPoint application program was given in English. Students who needed help either asked the teacher or fellow students. The teacher demonstrated how to create the first slide, including how to choose an empty slide, where to find WordArt (a

special font program within Word with 3-D capabilities for titles, etc.) , how to find clip art from the clip art gallery within Word or accessed from Microsoft's own Internet clip art site, and how to place text inside a text box. This took approximately 35 minutes. Students were required to supply the following information on the first slide: name, class, year in university and teacher's name and nationality. They could enhance the first slide with one graphic of their own choosing. The teacher checked to make sure all the students were finished or near-finished the first slide before discussing slides two, three, four and five. Slide two asked students to report on their interests or hobbies, slide three asked for foods they liked and disliked, slide four asked for an interesting story from the student's past, and slide five asked students to express future goals or plans. There was 35 minutes of class time remaining and students were required to complete the slide show presentation by the following class. This meant most students would have to finish their presentation outside of class time.

Class 6 and 7: First Year Psychology Majors

These classes are a one year required course in general English language studies, emphasizing reading and listening skills on the theme of British culture. In these two classes of 42 students each, the students were asked to choose one chapter from the textbook for reading and those who chose the same chapter formed a group. After some negotiation among the students, ten groups in the first class and eight groups in the second class were formed; each group composed of two to ten students. Each group then studied their selected chapter/topic from their reading textbook. The textbook covers the following current topics about Britain: Multiculturalism, Househusbands, Family Finances, Aging Society, Cohabitation, Images of Japan in the British Media and Television.

In the first class of the second semester, beginning in September, the instructor gave a presentation on one chapter titled 'Responsibility' in English and demonstrated how to use PowerPoint in Japanese. The students were asked to prepare their PowerPoint presentation as a group and to hand in their slides on a floppy disk a week before their presentation day. The teacher encouraged them to summarize the contents of the reading material and include a critical interpretation of the writer's conclusion in English. A few of the students tried to make a complete presentation in English, but the majority just read the quoted texts in English and gave their presentation in Japanese.

Even though the majority of students were unfamiliar with the presentation software, there were students with prior working knowledge of PowerPoint and they were able to help their inexperienced classmates. Each group prepared 8 to 15 slides and each presentation lasted for 5 to 10 minutes.

Many of the presentations included interesting pictures and related data the students had found on the Internet. A few students utilized the animation function found in PowerPoint, which the rest of the students seemed to enjoy.

Although the instructor found the PowerPoint presentations to be fairly good overall, there is a lot of work to be done on both sides: students and teachers. The students need to learn how to better organize a presentation and how to use visual images and data more effectively. The teacher must be more familiar with basic and advanced functions of PowerPoint in order to offer useful pieces of advice on how to use it more effectively.

Since the project was the first experience for the instructor and students, each element of the PowerPoint presentation was not examined closely. Twenty points (20% of the semester grade) were given to well-prepared presentations and ten to fifteen points to less-prepared ones. Preparing a PowerPoint presentation proved to be much more enjoyable than expected but more time-consuming than expected. Therefore instructors must come up with a time-saving system to introduce this PowerPoint system.

VI. Student Responses and Discussion

A. Data Collection

The data was obtained through a common questionnaire written by the three instructors. English and Japanese versions are shown in the Appendix. The questionnaire was given out at the end of the year to five of the seven classes in the study (Classes 1, 4, 5, 6, 7). The other two classes were single-semester classes and had been completed. The purpose of the questionnaire was to understand the students' attitudes toward presentation software. The questionnaire encompassed 25 questions and was written in Japanese. Students could answer in either English or Japanese. The questions were divided into five areas: 1) General information concerning prior computer/PowerPoint experience, 2) Students' perceived ease or difficulty using PowerPoint, 3) Students' perceived effectiveness of PowerPoint for making presentations in English, 4) Preference for future use, 5) The level of enjoyment/interest while using PowerPoint.

1. General Questions:

General questions were employed to determine the students' previous experience with speech making, computers and the PowerPoint software application. In particular, questions 2, 3 and 4 dealt with prior exposure.

2. Students' Perceived Ease or Difficulty Using PowerPoint:

Questions 9, 11, 12, 16 and 25 addressed this issue. Question 9 focused on the level of difficulty using PowerPoint, while question 11 dealt with technical or other difficulties students encountered. Question 12 measured the level of guidance given, question 16 asks students if outside help was needed, and question 25 covered general comments, some of which pertained to this section of the study.

3. Students' Perceived Effectiveness of PowerPoint For Improving English and/or Presentations:

Questions 17, and 18 dealt specifically with this issue. Question 17 asked participants if they thought giving a presentation using PowerPoint was a useful activity for learning English, and question 18 asked participants if they learned anything by watching their classmates' presentations.

4. Preference for Future Use:

Questions 21, 22, 24 and 25 allowed participants to provide feedback regarding their feeling about using PowerPoint in the classroom in the future. Question 21 specifically asked participants if they were interested in doing PowerPoint presentations in the future. Questions 22 and 24 were indirectly related to future use: question 22 asked how many PowerPoint presentations they would like to do in a year while question 24 pertained to learning advanced PowerPoint skills in the future. Question 25 covered general comments, some of which pertained to this section of the study.

5. The Level of Enjoyment/Interest While Using PowerPoint:

Questions 19, and 25 were relevant to the question of enjoyment and interest. Question 19 specifically asked participants whether using PowerPoint was an enjoyable experience. Question 25 was a general comment question with some comments showing relevancy to the question of level of enjoyment.

B. Questionnaire Results

The results shown below were obtained from responses to the Likert-scale questions on the questionnaire (Questions 2, 9, 10, 17, 18, 19, 20, 21, and 24); circle the best choice-type questions (Questions 3, 4 and 15); a fill in the number question (Question 22); and two yes/no check-type questions (Questions 16 and 18). Data obtained from teacher observation and the open-ended questions can be found in the discussion section and was used to qualify the data below.

From the questionnaire it was learned that 21.3% of the students had previous experience with PowerPoint (Table 1) . 78.7% had no prior experience with the application. Regarding previous speech making experience, 20.4% of the students had given a speech before but 79.6% had no past experience with speech making (Table 2) . 70.5% of the students in the study had never tried PowerPoint outside of this study, while 20.2% had used PowerPoint in a computer school (Table 3) . Only 2.6% had used PowerPoint in the university's computer room, 2% had used it in high school and 4.7% of the students had tried it in their homes. Only 4% of students in the study from all classes rated themselves competent with PowerPoint.

Table 1 Previous PowerPoint Experience

Class	Students with experience	No previous experience	N	% with experience
1	3	37	40	7.5%
4	1	9	10	10.0%
5	4	26	30	13.3%
6	14	21	35	40.0%
7	10	25	35	28.5%
Total	32 (21.3%)	118 (78.7%)	150	

Table 2 Previous Speech-making Experience

Class	Students with experience	No previous experience	N	% with experience
1	5	36	41	12.1%
4	7	3	10	70.0%
5	4	26	30	13.3%
6	5	31	36	13.8%
7	10	25	35	28.5%
Total	31 (20.4%)	121 (79.6%)	152	

Table 3 Place of PowerPoint Experience

Class	Home	High school	University Computer Room	Computer School	Classroom used in this study	N
1	1	0	0	8	31	40
4	1	0	0	0	9	10
5	3	1	0	5	20	29
6	1	1	1	12	20	35
7	1	1	3	5	25	35
Total	7 (4.7%)	3 (2%)	4 (2.6%)	30 (20.2%)	105 (70.5%)	149

Regarding the students' perceived ease or difficulty using PowerPoint, 2% of students reporting said that PowerPoint was very easy to use (Table 4) . It should be noted that this 2% came from the Japanese instructor's students only. 10.6% of the students surveyed reported that PowerPoint was easy to use. 49% responded "so so" to the question of ease/difficulty using PowerPoint. 29.8% said using PowerPoint was hard, and 8.6% said it was very hard to use the software program. In terms of the guidance students received (Table 5) , only 78 students responded. Of the 78 that responded, 62.8% reported that it was hard to understand the instructions on the use of PowerPoint. 3.9% said the instruction was "so so" in terms of difficulty understanding, and 33.3% reported that they could easily understand the instructions. One problem area numerous students had trouble with was with the timing of visuals. PowerPoint allows users to set each slide automatically, meaning the presenter need not click the mouse to advance each slide. However, this type of "automatic" slide show (presentation) requires very good preparation (to match the speech with the visual show) on the part of the speaker. This problem has been noted in other studies (Schenone-Stevens, p. 4, 1996) .

Table 4 Level of Ease/Difficulty Using PowerPoint

Class	Very Easy	Easy	So So	Hard	Very Hard	N
1	0	1	14	18	8	41
4	0	2	7	0	1	10
5	0	3	19	7	1	30
6	2	5	15	11	1	34
7	1	5	19	9	2	36
Description	Very Easy	Easy	So So	Hard	Very Hard	N = 151
Combined %	2.0%	10.6%	49%	29.8%	8.6%	100%

Table 5 Description of the Instruction/Guidance Given in the Use of PowerPoint Throughout the Study

Class	Instructions hard to follow	So so	Instructions easy to follow	N
1	24	2	5	31
4	6	1	3	10
5	11	0	15	26
6	No response to this question because no guidance given			
7	8	0	3	11
Combined %	62.8%	3.9%	33.3%	N = 78

Question 17 asked students whether or not they felt PowerPoint was useful for learning English (Table 6) . Overall, just under 47% said that PowerPoint was useful or very useful for learning English. 29.5% said that PowerPoint was "so so" in terms of being a useful tool for learning English

Table 6 Usefulness of PowerPoint for Learning English

Class	5 (Very Useful)	4 (Useful)	3 (So so)	2 (A little useful)	1 (Not Useful)	N
1	3	18	11	7	2	41
4	2	5	3	0	0	10
5	6	11	5	6	1	29
6	0	8	16	8	2	34
7	3	12	8	5	4	32
Combined %	9.6%	37%	29.5%	17.7%	6.2%	N = 146

Table 7 Number and Percentage of Students Who Learned By Watching Classmates' Presentations

Class	5 (Learned a lot)	4	3 (So so)	2	1 (Didn't Learn)	N
1	5	8	19	8	1	41
4	3	5	2	0	0	10
5	8	11	8	2	0	29
6	1	10	15	6	3	35
7	6	15	6	3	2	32
Combined %	15.6%	33.3%	34%	13.0%	4.1%	N = 147

and 23.9% reported that PowerPoint had little or no effect on learning English. Question 18 asked students if they learned by watching classmates do PowerPoint presentations (Table 7). 48.9% said they learned a lot or quite a bit by watching their classmates' presentations while 34% were neutral. 17.1% said that they did not learn much or anything from watching their peers' PowerPoint presentations.

Regarding the students' desire to use PowerPoint in the future (Table 8), 45.1% said they were interested (desired to use) or very interested (desired very much) in using the application in the future. 28% were in the middle regarding its future use and 27.3% said they were not interested much or at all in doing PowerPoint presentations in the future. Question 22 (Table 9) inquired as to the number of PowerPoint presentations students would like to do the next year. Overall 15.6% of students surveyed said they did not want to do any PowerPoint presentations the following year. 39% said one presentation was sufficient, 27% reported two presentations were enough, 14.3% reported that they would like to do three presentations with the software, 2.7% would like to do four presentations and 1.4% wanted to do at least 5 the next year. Question 24 (Table 10) asked students about their feelings concerning learning more advanced techniques with the PowerPoint application. A slight majority of students (53.4%) expressed a desire to learn more PowerPoint skills (a score of 4 or 5) while 27.1% were divided over the idea. 19.5% were not interested or only slightly interested in learning advanced techniques.

Table 8 Students' Who Desire To Use PowerPoint in the Future

Class	5(Desire very much)	4(desire)	3(So so)	2(Little desire)	1(No Desire)	N
1	2	11	11	11	4	39
4	2	4	2	2	0	10
5	4	11	11	3	0	29
6	5	11	9	6	3	34
7	7	7	7	5	5	31
Combined %	14%	30.7%	28%	18.9%	8.4%	N = 143

Table 9 Number of PowerPoint Presentations Preferred Next Year by Students

Class	5 presentations	4	3	2	1	0 Presentations	N
1	0	2	4	12	14	9	41
4	0	1	3	4	1	1	10
5	2	1	7	11	7	1	29
6	0	0	2	8	20	6	36
7	0	0	5	5	15	6	31
Combined %	1.4%	2.7%	14.3%	27%	39%	15.6%	N = 147

Table 10 Students Who Want To Learn More Advanced Techniques with PowerPoint

Class	5 Strong desire to learn	4	3 Neutral	2	1 No desire to learn	N
1	3	10	15	7	4	39
4	4	3	3	0	0	10
5	9	13	6	1	0	29
6	8	12	7	5	3	35
7	6	9	8	6	2	31
Combined %	20.8%	32.6%	27.1%	13.2%	6.3%	N = 144

Question 19 (Table 11) asked students about the level of enjoyment they felt while using PowerPoint to make presentations. 27.4% said using PowerPoint was a very enjoyable experience while 35.6% said it was enjoyable. 19.9% were neutral regarding the level of enjoyment, 10.9% said they enjoyed using PowerPoint a little and 6.2% did not enjoy using PowerPoint at all.

Table 11 Students Who Enjoyed Using PowerPoint

Class	5(Very Enjoyable)	4(Enjoyable)	3(So so)	2(A little enjoyable)	1(Not Enjoyable)	N
1	5	10	11	10	4	40
4	4	5	1	0	0	10
5	15	11	3	0	0	29
6	8	14	8	3	2	35
7	8	12	6	3	3	32
Combined %	27.4%	35.6%	19.9%	10.9%	6.2%	N = 146

C. Discussion Concerning Students' Attitudes to PowerPoint

The overall results of the questionnaire revealed the following common themes: most of the students had little or no previous PowerPoint experience prior to the study; a high percentage of students found PowerPoint difficult to use; nearly half the students thought PowerPoint was a useful tool for learning English; nearly half expressed a desire to continue using PowerPoint in the future; and a majority of students felt using PowerPoint was an enjoyable experience. Findings are discussed below in more detail.

Previous experience with PowerPoint

Although all the computers on campus are equipped with the PowerPoint software program, the results of the study indicated that a high majority of students had little or no experience with the program in any of their other classes. This is not surprising, as studies have shown teachers to be reluctant users of computer software (outside of regular computer class) (Znamenskaia, Guan, and Young, 1999:25). The reasons for the reluctance varies from teacher to teacher (e.g. too time-consuming or unsure of the true learning value of the software involved or simply have not heard of the software), but embarrassment may also play a part. As Hurn and Thibeault point out, "some teachers may be embarrassed at being less knowledgeable about computers than the students" (p. 3). Though PowerPoint is rather intuitive as far as software programs go, problems do occur and teachers may be asked to solve problems to which they do not know the answer. (see section IV - hardware/software adaptation). Another reason why students in this study had little or no experience with PowerPoint could be linked to the students' university experience. Most of the students reporting were first year students who may yet encounter PowerPoint in some of the upper year classes.

Students' Perceived Ease or Difficulty Using PowerPoint

Numerous students in this study reported difficulties using PowerPoint. The difficulties were in three main areas: 1) initial instruction and/or guidance, 2) problems using animations and transitions, and 3) writing the English to be used in the slides.

Regarding the problems with instruction, this did not come as a major surprise. We wanted to test the "intuitive" design of PowerPoint and so instructions were kept to a minimum (anywhere from zero to 35 minutes). The only class that received step-by-step instructions (at least initially) was the seminar class, where the focus was on using the program's functions and less on speech making, per se. It appears, however, that even with the step-by-step instruction, students found it difficult (60% of the students in the seminar class reported it was hard to follow instructions).

Two of the teachers were native English teachers and very little Japanese was used during the instruction period. Since instruction was virtually nil in the Japanese instructor's classes, it is impossible to compare the effectiveness of English versus Japanese instruction. In one class (6) no guidance was given. The fact that many students complained about not being able to understand the English instruction underscores a problem. Interestingly enough, in the class of English majors, 15 of the 26 students who responded said the instruction was easy to follow. In the other foreign teacher's class of non-English majors, 77% said it was hard to follow the instructions. Since it is impossible to measure the effectiveness of the two teachers' instruction we can only speculate, but since both instructors used English and instruction time was short, it is probable that the non-English majors had a harder time understanding the instructions in English. Further research is needed to determine the optimum level of English students require if instruction is limited to English (and carried out verbally) .

Numerous students reported problems with animations and/or transitions. This was due for the simple reason that the teachers did not cover this technical aspect of PowerPoint in detail in the classroom. In fact, none of the students were judged on their ability to animate slides, except for the seminar class (where the focus was on the technology) . Only two students reported problems with importing graphics or clip art and no student reported problems with background design, fonts, or file-saving procedures (although teacher observation determined that file saving was a problem for many) . Generally, problems with animating slides were the result of more experienced students showing off their expertise with animations. Once other less-skilled students saw what the more-experienced students were doing with their slides, they too wanted to employ animations. Unfortunately, not all the students were able to master this function and problems occurred. Since instruction time was short, students received very little information on the subject of animating slides from the teachers (usually students asked first) . Thus, students relied on friends for much of the information. We would like to point out that these problems rarely affected the performance of the presentation. Some students however felt their presentations were ineffective if they had a flaw with this technical aspect. The same type of problem occurred with transitions (a function allowing slides to advance automatically) . Again, some of the more experienced and/or more ambitious students preferred to set their slide shows automatically. Although timing the speaking part of the presentation to coincide with the visual aspect of the slide show is very impressive if done well, few students had the skill to pull it off. Many students that tried found themselves speaking about a topic accompanied by visuals connected to the next or previous topic.

Students' Perceived Effectiveness of PowerPoint for improving English and/or presentations:

One of the more important findings of the study pertains to students' feelings about PowerPoint as a tool for learning English. Although nearly half said it was useful, it was hoped that a large majority would find it valuable as an aid to learning English. Perhaps it was just naive thinking on the part of the researchers. Since studies have shown that most teachers themselves are unaware of the value of presentation software as a teaching/learning tool (Znamenskaia, Guan and Young, 1996) , it should not be surprising to find students are not sure either. More research is needed concerning presentation software and how it directly affects learning.

Item 18 on the questionnaire asked students to report any changes in learning as a result of watching classmates' presentations. Because respondents answered on a Likert-scale (1 to 5) , the actual processes involved are unknown (i.e. What exactly did they learn from watching?) . In one class (English majors) however, students made numerous changes to their original presentation designs after watching their classmates' presentations. This was possible because all the students did the presentations twice (a practice and scored presentation) in front of their classmates. This may explain why a higher percentage of students in this class indicated changes in learning compared with the other classes (since only this class used this procedure) . It may also explain why this class showed the highest percentage of enjoyment using PowerPoint overall (89% gave a 4 or 5 on the Likert scale) . This is conjecture on the authors' part, however, as data from the open-ended questions on the survey did not reveal enough information concerning why students enjoyed using PowerPoint. The most common response from students was that PowerPoint was hard but fun. An interesting discovery came from Item 13 (How did you feel after the presentation?) . Fourteen students reported that they think they did well with the PowerPoint part of the presentation but they were weak with the English part.

Preference for Future Use

Regarding the students' desire to continue using PowerPoint in the classroom in the future, the results were somewhat mixed. Responses to question 21 were somewhat disappointing (only 45% said they were interested or very interested in using PowerPoint in the future) . However, responding to question 22, only 15.6% said they did not want to do PowerPoint presentations the following year. Only 19.5% of the students said they were not interested in learning advanced techniques. It is possible that many students are somewhat hesitant about using PowerPoint the following year since many had trouble understanding instructions and because much of the work had to be done outside of class. As one student pointed out, "You should be able to get all your work done in class; I had to work outside of class". The amount of preparation time

needed outside the class is one area that needs to be addressed and researched. Although assigned work is part of the education process, it must be carefully assessed since access to computers is a necessary requirement. In other words, many students may not be able to work on assignments at home.

The Level of Enjoyment/Interest While Using PowerPoint

In the area of interest and enjoyment, results of the questionnaire and teacher observation suggest that a majority of students enjoyed using PowerPoint. However, the data also suggests that students found the application program much more enjoyable than the speech-making part. The overall message from students concerning PowerPoint was that it was hard, but fun. More students were disappointed with their speech-making skills (or lack thereof) . This seems natural however, as the spoken word is much more difficult (and students language skills are exposed) . In hindsight, one of the instructors felt he should have spent more time on speech-making skills in order to lesson the fear of speaking in front of an audience. As Mauseland and Dortch argue, there must be a balance between the use of technology and the spoken word (p. 30) .

VII. Limitations and Recommendations

On the basis of the results of this study, there is not enough clear evidence to show that all students respond well to presentation software. It is also highly probable that teachers will encounter many of the problems mentioned in question one in this paper. However, the results also show that teachers can, under the right circumstances, enjoy a level of success high enough to employ presentation software in the classroom. Since many schools, colleges and universities have access to the same computer technology discussed in this paper, it seems worthwhile to investigate ways EFL teachers can exploit the oral presentation technology already available in their schools. With this in mind, we offer the following recommendations:

A. Preparation Time

Before asking students to produce a presentation in PowerPoint, an instructor should give them time to explore and test the software. Many students complained that they needed more instruction on the use of PowerPoint before creating their presentations. Also, it may be necessary to give instructions, at least partially, in the students' mother language. A manual in the students' mother language could be given to assist them with basic functions. This is more important if instruction is solely done in the target language.

B. Amount of Graphics

Limit the number of graphic elements (photos, graphs, charts, clip art) in a presentation. When scanning equipment is not available for students to input their own photos or art, it can be very time-consuming for the instructor. It has also been pointed out that too many technical dimensions (graphics, animations, photos, etc.) can divert an audience from the content (Hlynka and Mason, 1998) .

C. Length of Presentation

Keep the length of the presentations fairly short for beginning level students. If presentations are made before a large number of students, 25 slides would be too long to hold their attention. Six to twelve per project is sufficient for beginning level projects. Teachers should judge the length based on material content and student ability (Kelly, 1999, p. 12) . Another reason for limiting the size has to do with file size. Presentations with 6-10 slides can fit on a floppy disk, more if the slides are primarily text. Longer presentations with a file size over 1.4 megabytes will require other storage media such as a Zip disk, MO disk or rewritable CDs.

D. Storage Options

For teachers working in facilities with limited storage ability (i.e. no CD-RWs or Zip/MO drives, etc.) it may be a good idea to limit graphics to illustrations and clip art. Photographs often take up more space, unless saved in lower resolution. In newer laboratories where computers are equipped with rewritable CDs, students should save all their projects on one CD-RW disk. This way they have all their work in one place. Finally, with a network folder, it is easier for the teacher to have a backup copy of each student's work. In this study, one of the teachers was fortunately able to give students copies of their presentations after the students inadvertently erased them or saved them improperly.

E. Varied Levels of Expertise

Often classes are composed of students with varying levels of computer expertise. If possible, group students with prior computer experience with novice computer users. It may be difficult for a teacher to spend time on an individual basis. This was evident from reports from students who said they relied on friends outside the class to help them.

F. Quality of Message

The organization, richness, and coherence of the content are more important than the visual

attraction. Make sure the technology does not distract from the message. As Mausehund and Dortch point out, "the emphasis should be on the basics of good presentation skills with judicious use of technology" (p. 30) . In this study one of the classes was a seminar class in the use of PowerPoint. Since the focus of the class was more on mastering the application to a high degree rather than speech making per se, the above comment may seem not to apply. However, any time students are required to make presentations in a foreign language (as they were in this study) , attention must be paid to the elements of making a successful presentation. In other words, the message should remain the most important element. The visuals, no matter how dynamic, should complement the content.

G. Multiple Presentations:

If possible, have the students do two or three PowerPoint presentations over the course of the year. Znamenskaia, Guan and Young (1999) note that the number of presentations per group or individual project may influence how well students perform with the software. However, the presentations do not have to be new. In fact, students can practice their presentations several times before a partner, group, or camera before having to do it for as graded project. In addition, by viewing other students' presentations, a student will pick up new ideas for design and content. A majority of students in this study enjoyed watching their classmates' presentations and most found watching others' presentations a good learning experience. In one of the classes where this procedure was carried out many students made changes to their presentations after the practice phase. This was due to noticing weak points (timing of slides and animations/eye contact/posture/ pronunciation and intonation, etc.) while doing the presentation. In addition to finding their own weak areas, students could see others' presentations. This also led them to make adjustments with their presentations. In this way, the presentation software's true value as an effective tool for improving students' learning performance, can be seen (Solomon et al., 1991) .

VIII. Conclusion

The use of presentation software such as PowerPoint is a new approach in teaching EFL speech-making. It is fraught with time-consuming adjustments that when overcome, can produce positive learning experiences for Japanese university students from a variety of majors in general education classes, not just those who are specializing in English. This two-semester study documented an initial trial of teaching presentation skills to 194 students, and showed promising results.

Concerning the first research aim, the software and hardware posed serious difficulties that can be handled by proper installation and instruction. In particular, to enable peer and self-evaluation of the presentations, a self-access recording laboratory is invaluable.

As for the second research aim, describing instructional approaches to using presentation software, each instructor used different approaches, adapted to the individual class aims, size, and levels. Each approach was useful and valuable for the applied situation. In further trials in the use of PowerPoint, instructors can use 1) individual presentations to summarize email exchanges, 2) group presentation to summarize and criticize literature, 3) individual presentations for self-introductions or explanations of issues of personal interest.

Finally, concerning the third research aim, the student response was thoughtful and positive. Overall, approximately half of the students felt growing confidence in their English speaking ability as well as a desire to continue using and learning presentation software. A majority of students experienced technical difficulties in handling the software, which reflects both the expected complexity of learning any new software tool, and also the instructors initial inexperience in teaching the software.

Presentation software as an EFL learning tool is in its infancy. There is no reason to hesitate having students use it if the proper equipment is already in place at a language learning institution. Teachers and students should both be aware of the heavy initial learning curve that accompanies the addition of this and any educational and technical innovation.

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16. Did you need any outside help to make your PowerPoint presentation? ___yes ___no
If yes, who helped you? _____

17. Do you think giving a presentation using PowerPoint is a useful activity for learning English?

A lot	←					→	Not at all
6		5	4	3	2		1

18. Do you think you learned anything by watching your classmates' presentations?

A lot	←					→	I learned nothing
6		5	4	3	2		1

19. Was using PowerPoint an enjoyable experience?

Very enjoyable	←					→	Not enjoyable
6		5	4	3	2		1

20. Did you enjoy giving a presentation (speech or other activity) in English?

Very much	←					→	Not at all
6		5	4	3	2		1

21. Are you interested in doing PowerPoint presentations in the future?

Very much	←					→	Not at all
6		5	4	3	2		1

22. If you had a chance to do PowerPoint presentations next year in English class, how many would you like to do in a year? 0 1 2 3 4 5

23. Do you think using PowerPoint to make presentations in English could help you in the future? ___
If yes, how? _____

24. Are you interested in learning more advanced techniques using PowerPoint?

Very interested	←					→	Not interested at all
6		5	4	3	2		1

25. Please write any comments you may have.

2001 PowerPoint Presentation Student Survey

Please fill out the survey. You do not have to write your name. Thank you.

1. あなたは何年生ですか? 1 2 3 4
2. 今年、授業でパワーポイントのソフトを使う前に使ったことがありますか? はい ___ いいえ ___
あなたはこの授業の前にパワーポイントをどの程度使っていましたか? 数字に○をつけてください。

大いに経験あり <-----> 経験なし				
5	4	3	2	1

3. 以前に英語で発表したことがありますか? はい ___ いいえ ___
4. 授業以外でパワーポイントをつかったことがありますか? ___ はい, 家で。 ___ はい, 高校で。
___ はい, 当校のLLスタジオで。 ___ はい, ほかのパソコン教室で。 ___ いいえ。
5. 今年、パワーポイントを使っていくつの発表を行いましたか? 数字に○をしてください。
0 1 2 3

その発表のそれぞれのテーマ, 時間, 場所, 役割を教えてください。

- (1). テーマは? _____ 発表時間は? ___ (分間)
場所? ___ 教室 か ___ LLスタジオ (チェックしてください)
グループで行った場合, あなたは _____ 発表者でしたか? または _____ 助手でしたか?
- (2). テーマは? _____ 発表時間は? ___ (分間)
場所? ___ 教室 か ___ LLスタジオ (チェックしてください)
グループで行った場合, あなたは _____ 発表者でしたか? または _____ 助手でしたか?
- (3). テーマは? _____ 発表時間は? ___ (分間)
場所? ___ 教室 か ___ LLスタジオ (チェックしてください)
グループで行った場合, あなたは _____ 発表者でしたか? または _____ 助手でしたか?

6. その発表の後, あなたはどのような感想を持ちましたか? _____

7. あなたは英語による発表を準備する時, パワーポイントを用いた準備はどうでしたか?
___ はい。 ___ いいえ。

8. あなたはどこで発表するのが好きですか? ___ 教室の同級生の前で ___ 仲間LLスタジオで

9. パワーポイントを用いた準備はどうでしたか?

とても簡単	簡単	まあまあ	難しい	とても難しい
5	4	3	2	1

10. 英語での発表はどうでしたか?

とても簡単	簡単	まあまあ	難しい	とても難しい
5	4	3	2	1

11. 何か技術的な問題がありましたか? また他に難しかった点は? _____

12. 最初に行われた導入説明は分かりやすかったですか? (意見を書いてください) _____

13. あなたは自分の発表がよくできたと思いますか? (自分の評価を書いてください) _____

14. 英語によるパワーポイント・プレゼンテーションを行ったのは今年が初めてのことでした。

このコースをより良いものにするため何か提案がありますか。

15. パワーポイントでスライド10枚のプレゼンテーションを作成するのに何時間位必要だと思いますか。
 1-2時間____ 2-3時間____ 3-4時間____ 4-5時間____ 5時間以上____

16. 自分のパワーポイントプレゼンテーションの作成を誰かに手伝ってもらおう必要がありましたか。
 ____はい ____いいえ はいの場合、誰に手伝ってもらいましたか _____

17. パワーポイント・プレゼンテーションは英語学習に役立つと思いますか。

とても役立つ	←		→	役立たない
5		4		3
		2		1

18. クラスメートのプレゼンテーションから何か学ぶことはありましたか。

たくさん	←		→	何も
5		4		3
		2		1

19. パワーポイントを使ってみて楽しかったですか。

とても楽しい	←		→	楽しくない
5		4		3
		2		1

20. 英語でのプレゼンテーション (スピーチ等) は楽しく行えましたか。

とても楽しい	←		→	楽しくない
5		4		3
		2		1

21. 将来パワーポイントでプレゼンテーションを行うことに興味がありますか。

とてもある	←		→	全くない
5		4		3
		2		1

22. 来年英語の授業でパワーポイントプレゼンテーションができるとしたら、一年間で何回したいと思いますか。 0 1 2 3 4 5

23. パワーポイントを使った英語のプレゼンテーション作成は将来役立つと思いますか。 ____
 どのように役立つと思いますか。 _____

24. パワーポイントのより高度なテクニックを学んでみたいと思いますか。

とても	←		→	全く
5		4		3
		2		1

25. 何か意見があれば自由に書いて下さい。