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DISTANCE EDUCATION, CALL AND GRAMMAR IN  
AN ADULT COMMUNITY COLLEGE OUTREACH  
PROGRAM: A CASE STUDY

by

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## ABSTRACT

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Title: Distance Education, CALL and Grammar in an Adult Community College Outreach Program: A Case Study

As educators of adult students in community ESL classes, it is important that we strive to find ways to make education of all levels more accessible. Immigrants may face many demands from family and work. These obstacles may impede their ability to attend language classes and pursue continuing education. Education opportunities could potentially assist in expanding opportunities in the workforce and increasing standard of living. Distance Education and Computer Assisted Language Learning (CALL) are two options that could facilitate students, which would otherwise be unable to attend traditional classes, reach these goals.

Previous studies in ESL researching benefits of Distant Education and CALL primarily focus on academic gains in comparison to traditional classes. While academic gains are crucial to further development of theses two areas, it is also important that we investigate the effects of Distance Education and CALL on students and institutions that offer such courses. For this reason, this thesis provides a descriptive case study of adults in a community based ESL classes taking a Distance Education grammar class using CALL. In addition to investigating the experiences and effects of CALL and Distance Education on the instructor and students, this thesis sought to answer if the student gains were acceptable by institution standards.

Two adult students in an intermediate grammar class and the researcher (as the instructor) participated in the study. The Intermediate grammar class was part of the Clackamas Community College (CCC) adult ESL program. The classes were held at an outreach center at a High School located in Canby, Oregon. The students comprised of one female and one male, both over the age of thirty from two different countries, Poland and Taiwan respectively. Both students had been enrolled in previous classes at CCC. The course was completed during fall, 2005 and winter, 2006.

Data were collected by pre-term and post-term questionnaires, student check lists, computer usage logs, student and instructor journals, student performance, and a third party interviewer. All data were analyzed qualitatively. Overall experiences of the students and instructor were positive and student gains exceeded minimum requirements set by the institution.

## DEDICATION



## ACKNOWLEDGEMENTS

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## Chapter I - Introduction

Like many projects of this nature writing this thesis was a journey of the unexpected. I come from a background in marketing and technology and strongly believe that knowledge of technology can be beneficial to all, even those who do not plan on using the skills in their occupation or daily lives. For my thesis I wanted to incorporate my past experience in training people to use technology with my new career of teaching English. My original assumptions were that distance education would not be appropriate for ESL (English as a Second Language) classes but I felt there was a role for CALL (Computer Assisted Language Learning) in the class. My proposed idea was to incorporate CALL into a beginning grammar class once a week as a supplement to in-class workbook activities. I ran a pilot in summer term 2005. It was very successful and I made some very valuable discoveries such as keeping the web address as simple as possible. This seemed crucial to students' ability to begin accessing and using a web site. I originally began to collect data in winter 2006. I enlisted a beginning grammar class as my participants. Concurrently, a group of higher level students were enrolled in an intermediate grammar class that was looking to be canceled due to low attendance.

The beginning grammar class at first appeared to be on target for successful data collection. All of the students chose to participate in the study and were willing to use the computer, but it was apparent that things were not going as planned. I am not sure what the difference was between the second group and the pilot group but the differences were clear and detrimental to my study. By the end of the second week, not one student had completed their tasks for the unit, filled any their log, or used the checklist. I had a very difficult time keeping students on track to study grammar during the time allotted in class

for grammar: those that would use the computer were more interested in other software or using email. It was at this time I determined this data collection was failing.

Meanwhile the intermediate grammar class had been cancelled and I felt inspired to help the students. Since I already had a dedicated grammar website and the ability to create online homework and quizzes, I did not feel it would be much more difficult to create an online course for the intermediate students. I sought approval from the department chairs and moved to quickly create unit one. I drew upon the same concept from the design and layout that I had used in the beginning grammar class. Things came together very quickly and it appeared that while the beginning grammar classes' use of CALL was a failure, the distance education class was turning out to be a success. It was here that I revisited my thesis. While initially opposed to the idea of distance education for ESL classes, I felt there seemed to be an opportunity for students to enroll in a class that would otherwise not be available. Even though I had not originally intended for the intermediate grammar class to be my thesis, I knew that keeping careful records of the students' progress and reactions would be important. With this in mind, I followed all of the same procedures with the intermediate grammar class as I had with the beginning grammar class such as giving them pre-term questionnaires and having them record feedback in their journals. It soon became apparent that my non-thesis project should be my thesis project. After the initial panic of having a thesis research project fail and then having to update approval on a new idea that seemingly sprung from the ground, I became very excited about what was happening. Rather than my research feeling as a final hoop to jump through, it became a legitimate answer to a problem faced by the college. I felt satisfaction in knowing I was helping the students and the ESL program.

This study aims at providing an in-depth description of an adult ESL grammar class using CALL in a distance education format. The data was collected during winter and spring term, 2006. The major participants were the two students I had, but I also used data collected from myself as the instructor and an observer. The main techniques for data collections were questionnaires, journals and computer statistics.

Concerning the organization of this paper, the first part is a literature review covering grammar pedagogy, CALL pedagogy, CALL research and distance education research. The literature review is followed by the methodology, data, and finally a discussion of the data collected including implications and suggestions for further research and the conclusion.



## Chapter II - Review of Literature

### Introduction

When I speak with adult students in a community college ESL (English as a Second Language) program about why they are studying English, one of two answers are usually stated: to improve employment opportunities or to further their education. Many of my students have experienced how grammar errors in the workplace or higher education can negatively affect opportunities for advancement.

Correspondingly, Hall (2000) claims there is a grammar deficit for undergraduate FL (Foreign Language) students and stresses the importance of grammatical knowledge in the academic setting. When considering the communicative versus structure-based methods of teaching language, Hall (2002) believes the answer to grammar improvement lies somewhere between the two methods. He goes on to suggest that using Computer Assisted Language Learning (CALL) and Information Technology (IT) can provide opportunities for students to overcome a shortfall in grammatical knowledge. CALL and IT can be used in various combinations to include explicit, implicit and exploratory grammar instruction (Hall, 2002). Hall's conclusions may be applied to adult ESL students.

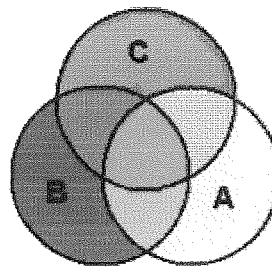
Community colleges provide an ideal environment for students to work on improving grammar, reading and writing skills, helping to prepare them for greater challenges. The community colleges traditionally offer classes that are economical, with convenient times and locations. Clackamas Community College, where this study takes place, has satellite locations which typically offer two to three classes each term. The classes are characteristically lower level classes as attendance mandates. As students

progress beyond the scope of classes offered at their local satellite, they are usually required to take classes on the main campus, which does not offer the flexibility, proximity and evening availability of the satellite locations. At this point, many students leave the program without the academic accomplishment of grammar, reading, and writing necessary to succeed in college or occupations that may require reading and writing skills. While it is in the best interest of the students, college and community to help these students stay in the program, attendance for advanced classes is too low at individual satellite campuses to make it viable. In seeking to find a solution to keeping intermediate to advanced students in the program, yet allowing them a flexible schedule that would accommodate their issues with childcare, work, and proximity to the main campus, I proposed a hybrid intermediate grammar distance education class. This trial class was used as the primary method to help evaluate the potential for distance education ESL classes within the Clackamas Community College ESL program. The classes were designed to be a minimum of 66% distance education, meaning the students would be on their own using the computer and or text book during this time. The other 33% time took place as face time with the instructor as informal meetings rather than in a formal grammar class.

There were several aspects that went into designing the distance education grammar class: the students' needs, the college requirements and previous research in grammar and distance education pedagogies. As discussed previously the students' needs were flexibility and convenience. The college's requirements included a mandatory text and specific learning outcomes (Appendix G). Finally, a literature review that was utilized in designing and implementing the grammar distance education trial project at

CCC – Canby Satellite, winter and spring, 2006. The following literature review will discuss four areas; grammar pedagogy, CALL pedagogy, CALL research and distance education. One can approach the information found in the review of literature similar to the process of using a Venn diagram. In this case **A** is grammar, **B** is CALL research and pedagogy and **C** is distance education.

**Image 2.1**



While there are various successful methods of teaching grammar, (Fotos, 2001 & Larson-Freeman, 2001) not all of those will work well within the CALL framework. Within the subset of what works in grammar instruction in a CALL environment, not all will be appropriate in a distance education delivery format. It is the combination of the four areas of focus that provides a sufficient amount of background knowledge in developing an appropriate CALL application for teaching grammar delivered in a distance education format. In addition to providing the researcher with the foundation of creating a pedagogically sound application the information will assist the reader with considerations regarding the project and terminology.

## **Pedagogical Theories in Grammar**

Theories on the most preferable way to teach grammar have changed significantly over time. As outlined by Hinkel and Fotos (2002), the first theories in grammar instructions were developed nearly 2000 years ago. The oldest theories focused on grammatical knowledge that produced students with advanced syntactic knowledge of the language but little or no communicative competence. Teaching shifted to the audio-lingual and direct approach based on repetitions and accurate production of the target language around the time of World War II. In the 1960s the teaching shifted to a functional approach that presented a single grammar unit, had students practice in a controlled manner, and then produce spontaneously. In the 1970s and early 1980s, grammar teaching again returned to a focus on formal grammar instruction. These theories were based on the concept that language was too complex to be learned naturally and complex mental processing was required to become competent. Simultaneously, a movement towards a more communicative teaching method was also evolving. Communicative language teaching is based on theories that students will pick up grammar naturally by using meaning focused input and that no formal grammar instruction is necessary. While some students are able to learn accurate linguistic forms solely from exposure, a very limited number are able to do so efficiently. This is especially true if they have passed the critical period (around puberty) or only received language exposure in a classroom (Larsen-Freeman, 2001).

Many educators now agree that explicit grammar instruction using form-focused exercises is necessary to assist students in developing grammatical accuracy necessary for academic and business success (Fotos, 2001). Larsen-Freeman (2001) suggests that

educators should strive for a balance between communicative and grammar-based instruction. By “focusing on form” within meaningful contexts, the instructor can teach grammar points without returning to decontextualized exercises. Some options in teaching form-focused grammar may include noticing and consciousness-raising tasks. Noticing is bringing a student’s attention to a grammatical form. Noticing may be accomplished by recasting a student’s incorrect response correctly, highlighting the form within the text and providing repeated examples of a form (input-flooding). The computational model of second language acquisition’s stance is that acquisition occurs from input. However, exposure to the forms may not be enough for the acquisition process, as learners may need to have their attention focused on the form (Hinkel and Fotots, 2002). Two studies Jourdenais, Ota, Staugger, Boyson and Doughty (1995) and Leeman, Argeagotia, Fridman, and Doughty (1995) provided evidence that when forms were highlighted (such as using bold type) that learners were more likely to use the new form, and that it benefited students in correcting their errors. (Hinkel, Fotots, 2002)

Consciousness-raising tasks may include providing students with examples of a form and requiring them to define the rule. Consciousness-raising may be especially for students that are immersed in a language and have already received exposure to the target form. In a study by Schmidt and Frota, (1986) Schmidt kept a detailed journal of his studies of Portuguese in Brazil. He commented, that once the instructor and made him consciously aware of a grammar form, he became more aware of how often it was used in conversations and began using it himself (Larsen-Freeman and Long, 1991).

Larsen-Freeman (2001) also states the necessity of negative feedback in helping language learners stop repeating their errors. Although, instructors should exercise care

that negative feedback is given at appropriate times and that it does not prevent learners from expressing themselves:

...Negative evidence gives students the feedback they need to reject or modify their hypotheses about how the target language is formed or functions. Students understand this, which explains why they often deliberately seek feedback. (p. 262)

Current research points to the necessity of explicit grammar teaching especially to adults. Using methods incorporating focus on form and negative feedback may help adults understand and use grammar forms quicker than by sole use of communicative-based teaching with no explicit grammar teaching. In my previous experience teaching grammar classes to adults, especially intermediate or higher levels, they not only expect explicit grammar instructions but at times appear frustrated by purely communicative tasks. The ability to easily customize text and create interactive environments, in comparison to print, may make CALL well-suited for the tasks suggested by today's researchers for effective grammar teaching, especially, consciousness-raising, noticing, input-flooding and negative feedback.

### **Pedagogical Theories and CALL**

Some instructors fear that computers will replace teachers. Many ESL professionals see CALL as providing non-meaningful input and removing human contact from language teaching. For these reasons many instructors may be resistant to incorporating CALL in their curriculum. Naiman (1993) writes that this is not necessarily true; if computers are used properly they allow students to take increased responsibility for their learning.

In response to educators that are concerned that computers will replace teachers, research suggests CALL be viewed as a teaching aide rather than as a replacement. Galavais (1998) suggests there are many advantages of using computers in an EFL / ESL setting. Benefits for students include motivating students, providing access to authentic materials, increasing language exposure outside the class and meeting the needs of different learning styles. However, Galavais (1998) does warn of a few disadvantages. These may include difficulty motivating students and teachers who do not like using computers, potential hardware and software complications, and poor computer training for both students and teachers.

A common mistake in incorporating CALL in the classroom tends to be choosing the computer application before designing a curriculum incorporating CALL. An instructor first should define the curriculum and then decide how CALL will fit best within the framework. In addition, those that design CALL applications need to be aware of the needs of instructors and students (Murray, 1999). In the case of this study the curriculum had already been designed by CCC full-time faculty and is mandated by the department. There is a definite list of objectives that the instructor teaching the course must meet, yet the college does allow for flexibility in assigning activities. This flexibility allows for the use of CALL to be integrated into the current curriculum, following suggestion by Murray (1999) that the curriculum design is established prior to the incorporation of CALL.

According to Levy (1997) much of CALL development is practitioner-led rather than research-led. Practitioner-led research is a bottom-up approach. In most cases a practitioner has a specific goal or concern and designs an application to address a learner

deficiency while research-led is top-down. Development begins at the conceptual level and uses theory to create CALL materials. In looking at various instruction design methods the media is selected near the end of the process (Levy, 1997 b.) Many researchers have warned against the field of CALL development becoming technology driven, yet Levy states:

...resources and learning opportunities that technology can provide are overlooked because the theoretical base is not powerful enough, or it does not anticipate the otherwise valid options that are available (p. 54)

Levy (1997, 1997b.) advises that in order for there to be a fit of CALL in the classroom, the technology should be considered in the early part of the development, Practitioner-led and research-led must work together to ensure the success of CALL.

Current literature seems to present some conflicts in advising the best practices for implementing CALL into the ESL classroom. While Murray (1999) advises that the curriculum should be well defined prior to choosing CALL, Levy (1997, 1997b.) cautions that the technology should be considered in the early part of curriculum development. If institutions provide educators with enough flexibility, it seems with clear expectations of the role of CALL; CALL should be able to be successfully integrated into a well designed ESL curriculum.

In considering the role of CALL in relation to the student, Mydlarski (1993) cites Coffin's suggestions that there are four pedagogical models for instructors in using CALL within the curriculum. The first is CALL as the Teacher's Partner. This would include using software as a presentation device, such as Microsoft's PowerPoint software. The second is using CALL as a Learner's Partner. This would include students



using computer applications individually or in small groups as a learning tool. The third model is an Exploratory Lesson. In this model students navigate freely through some large body of data, e.g., open access to the World Wide Web or other databases. The fourth model is a Creative Medium. Here students may design an independent project. Examples include designing a web page, video or PowerPoint presentation (Mydlarski, 1993)

Similar to expanding the use of CALL as described by Mydlarski (1993), Levy (1998) states that many professionals view software in only a one-to-one framework between the computer and the student. Evaluating CALL as one kind of instructional activity has led to confusion in evaluating its effectiveness. Levy (1998) states that instructors should understand the tutor and tool aspects of CALL so that useful aspects are not overlooked. In comparing these suggestions to Coffin's four models (Mydlarski, 1993), the tutoring would be correlated as a Learner's partner, while the Teacher's Partner, Exploratory Lesson and Creative Medium may be seen more as tools. Many applications designed as tutors will manage interactions, provide feedback and provide level-appropriate input. The student can manage much of the tutoring aspect on his or her own time and provide the additional benefit of encouraging autonomous learning. Using CALL as a tool requires more management and guidance from the instructor as the function of the tool does not include clearly defined goals and tasks. The tools may also be useful for teachers in providing demonstrations and evaluations (Levy, 1998).

The preferable approach to incorporating CALL into the class would involve either instructor design or at least heavy involvement in the process (McCreesh, 1993). While this is not always possible or plausible, Chapelle (2001) identifies the following

criteria for evaluating CALL for instruction to assist instructors in choosing the appropriate applications of CALL in their classroom. CALL activities should present an opportunity for language learning rather than merely language use. Instructors need to verify that the application fits the learner, is appropriate to their ability and ensure the CALL application provides meaning focused activities. The CALL activities should be authentic so that the activities correspond with the target activities outside the classroom. The CALL applications should provide a benefit to the student in improved performance, increased knowledge of culture and developing meta-cognitive abilities. Finally the CALL task should be practical, easy for the teacher and student to learn, and provide students with adequate access to appropriate computer equipment appropriate to support CALL.

In addition to considering Chapelle's suggestions for evaluating CALL, instructors should be aware that although many applications may align well with current SLA pedagogical theories, programs may not be much more than workbooks in a multimedia package. This might be acceptable if the instructor's goals are to give students more practice and familiarize them with technology. However, if CALL is to be a more integral part of the curriculum more functionality may be required. Holliday (1999) suggests the following to assist in identifying additional recommended aspects of CALL. The application should provide students with opportunities for interaction to negotiate meanings, choose to hear, speak, read or write, and have a rich context to facilitate comprehensible input. The application should also focus on target features of the target language. Finally students should be able to receive or access feedback or self-assessments reflecting their results. (Holliday, 1999).

Another area of CALL pedagogy involves the learners themselves. Learning does not only take place in the classroom. Successful learners should develop some type of autonomy in their educational goals. This could mean seeking out speakers of the target language and using independent study. CALL provides several advantages to give students control over their learning process. Students are able to control the amount of time they spend on an activity. They can skip one they are familiar with or repeat a difficult exercise multiple times without fear of embarrassment or wasting other students' time. CALL can provide a constant measurement of success because many applications track students' progress by making the process of setting and meeting goals easier (Healy, 1999).

Many instructors attempt to be sensitive to the various learning styles of their students (Soo, 1999). CALL can be a useful method in addressing the multiple learning styles of students. A well-designed application will allow students to learn using a variety of senses, including visual, aural and kinesthetic. Studies show that students learn better when information is presented in multiple mediums. While no software will match the learning styles of all students, teachers should help students identify their learning styles to choose applications that will be a best fit (Soo, 1999).

While research in the area of CALL pedagogy appears scarce in comparison to other areas of second language acquisition suggestions for sound development are sometimes contradictory, such as what is the best stage for incorporating CALL into the curriculum. It could be a daunting if not impossible task to attempt and design an application that meets all of the criteria mentioned in this section of the literature review. While the perfect CALL application may never exist there are several issues that come up

as crucial. The success of developing a pedagogically sound application that fits well into a curriculum will require the cooperation of developers and instructors. Instructors should be thoughtful in considering their students' needs, goals and resources prior to implementing CALL. As well as considering the students' needs, instructors should be aware of their expectations of what roll CALL will play in their curriculum prior to implementation. With proper planning and clear objectives in place CALL can likely be integrated successfully within the ESL curriculum.

### **CALL Research**

The previous section regarding CALL pedagogical theories revolved more around best practices in designing CALL and incorporating it into a curriculum as well as how it might benefit students and enrich a program. The following section focuses on the results of CALL in classes where it has been incorporated and looks at features of the applications and their outcomes. While some of the research of CALL in this section overlaps with CALL pedagogy I attempt to focus more on specific elements of the applications.

Gillespie and McKee (1999) investigated how CALL fits into an existing curriculum. Their research that took place at the University of Ulster examined the success of various CALL programs with curriculum. CALL packages were divided into four categories: occasional use, independent study, developing particular skills and as a focus of the course. The results concluded that at the present time CALL does not fit easily into current teaching designs or curriculum. This is due to CALL being seen as an add-on rather than integrated part of the course, and the possible unwillingness of instructors to abandon traditional activities as well as inadequate availability of

equipment. This furthers the suggestions of other researchers that curriculum needs to be designed with CALL in consideration rather than retro fitting it into an existing curriculum. After designing a CALL-modeled curriculum, it is important to choose applications that will meet the needs and expectations of the students.

In addressing students' needs, McCreesh (1993) asked the following questions in her research to create the most beneficial exercises for her students: How much variety is necessary among the exercises? How long should exercises be? How much time are students willing to spend working on computer exercises? How many explanations of errors do students need and what effect does student proficiency have on the previous questions? McCreesh's research (1993) presented some interesting results that may provide useful insight for instructors using a CALL included curriculum. One of her most interesting findings was that almost all students completed additional exercises that were not required homework. McCreesh (1993) describes this result as "A computer provides the sugar coating for the grammatical pill." (p.363). McCreesh (1993) claims the exercises did not have to be innovative and suggested that adding 10 more questions in the database than necessary and then randomizing provided sufficient variety. Most importantly, she argued that the questions should be at the appropriate student level rather than varied and interesting. The majority of students preferred having between 30 to 40 exercises available in each form. Students wanted explanations to forms regardless if their answer was correct or incorrect. Answering an exercise correctly did not always correlate with understanding the form. Nagata (1993) also stresses the importance of feedback:

If the potential of computer-assisted language instruction as individualized supervised learning is to be realized, we must develop programs that support detailed error analysis and feedback targeted to specific deficiencies in the student's performance.(1993, p.330)

While McCreesh (1993) designed her own CALL, these findings could be useful to instructors purchasing CALL off the shelf. McCreesh (1993) compared the test results from students using her CALL to those in previous years that had not been assigned CALL tasks and noticed a notable improvement. However, other variables in instruction make it difficult to determine a true correlation.

Chapelle (2001) states that given the importance of focus on form there has been little research on the ability of CALL programs to focus a learner's attention. She does cite one study by Doughty in 1991 that compared the effects of comprehension of grammatical forms that were and were not explicitly highlighted in the text. Both groups did better on grammar post-tests but the group with the highlighted structure performed better in the reading comprehension. The study offered the potential benefits of highlighted forms.

Many of the current grammar applications contain text that is hyperlinked. A study by De Ridder (2002) investigated the effects of hyper-linked text on incidental vocabulary learning, text comprehension and the reading process. The results indicated that when reading a text with hyperlinks that brought up a gloss, readers were much more likely to consult the gloss. The study showed no evidence of increase in incidental learning of vocabulary, though it did not slow down the reading process or negatively affect

comprehension. The results of this study imply that hyperlinked forms in grammar software will increase the noticing of the highlighted grammatical feature for students.

Similar to De Ridder's (2002) study, Brett investigated incidental language learning in a mandatory self-study component in an undergraduate language class. Once again this study showed no incidental learning effects. However, there was strong evidence that the multimedia application made forms more notable and encouraged noticing and negotiation of meaning (Brett, 1998).

In further investigation examining the form, function and impact of interaction in a web-based English course, an experimental study by Chen, Belkada and Okamoto (2004), examined Japanese learners. The first research question asked: "What mode of interaction facilitates comprehension better and could lead to more effective language acquisition?" (p.47)

The study found that both tasks via inter-personal and intra-personal communication promoted effective listening comprehension and L2 development. In measuring students' attitudes the researchers (Chen, Belkada and Okamoto, 2004) found that students reacted positively towards the ability to initiate a feedback from the application. This strongly suggests that self-initiated clarification and self-negotiated comprehensible output should be part of the instructional design in the CALL environment (Chen, Belkada and Okamoto, 2004).

The second question asked:

"Does negotiation of meaning facilitate greater comprehension and production?"  
(p.47)

There was no data that revealed that negotiation of meaning increased comprehension or production. While learning language through communication has been shown to be successful in face-to-face learning situations, it has not been demonstrated in a CALL environment. CALL has been shown to have other benefits such as encouraging student autonomy and facilitating learning activities. It is up to the instructors and authors to design applications to maximize the language learning process and encourage communicative competence (Chen, Belkada and Okamoto, 2004).

An additional investigation of the effects on student performance of CALL curriculums was part of the Gillespie and McKee (1999) study. The findings in the area of student performance were as follows. Students prefer to have immediate and detailed feedback when using specific learning programs. This corresponds with findings cited in studies by McCreesh (1993) and Chen, Belkada and Okamoto (2004). Furthermore, the students, especially in vocabulary learning, saw the hyperlinked text as useful. Pair work appeared to be more productive than individual work. When on their own, students were much more likely to use the web and email than other learning programs. Students were very sensitive to the availability and reliability of computers. It is suggested that setting up reliable labs, adequate stations and flexible hours be a priority for institutions wanting to incorporate CALL into the curriculum. In their investigation of the impact of CALL on student learning, the researchers (Gillespie and McKee, 1999) found positive findings that CALL increased performance and skills in areas focused on specific language skills. In addition, the effects of CALL are greatly improved by the use of networking environment.



Similar to research in pedagogical theories in CALL, research on the use of CALL demonstrates the importance of designing CALL and the curriculum in conjunction rather than incorporating CALL after the fact. Research in the use of CALL has provided useful insight into how students use CALL and some behaviors in using CALL that are different from students studying grammar in traditional methods. Instructors could take advantage of traits such as students willingness to perform more activities, look up meanings in glosses and repeat activities when they have difficulties in comparison to traditional workbook exercises. CALL can also be beneficial in aiding a student in controlling their own education and gaining autonomy in learning. In addition to the importance of sound design principles, CALL research shows the significance of providing quality equipment and availability of resources and well trained students and instructors in order to ensure student and program success.

### **Distance Education**

In the research previously discussed the use of CALL was discussed in primarily as part of a traditional classroom curriculum usually accessed outside the classroom as a form of homework. By offering language classes that students have dramatically reduced seat time the area of distance education must also be researched. Distance education is not new to the field of education. While specific definitions of distance education vary, it is widely accepted that distance education is delivering education to students that are not face to face with an instructor. The delivery methods of distance education are numerous. In the simplest form a book can be thought of as distance education in that the person reading the book can be far removed from the person sharing the knowledge (the author). Iredale (1993) states that the delivery of the Ten Commandments was a very early

example of distance learning. Correspondence courses are the oldest examples of modern distance education. (Iredale, 1993)

There is controversy among educators of the specifics of successful distance learning programs. The fundamental idea behind distance education is making knowledge more accessible for those that can not attend traditional courses. Peters (2001) states that there must be a balance between accessibility and quality and that the two intersect on bisecting planes. The greater the accessibility, the less contact can be made, theoretically lowering the quality of education. In response to this dilemma, many programs are implementing optional or mandatory contact time. Some of the options for contact include live online chats, ListServes or meetings that include faculty and/ or only students. Radio and Television University in China has distance education classes that require nearly 24 hours a month of meetings or teleconference sessions. In such cases, critics debate if with such requirements, it is still considered distance learning. Peters (2001) argues that contact is directly correlated to quality as knowledge can only be developed through discussion.

In designing distance education classes and trying to find the appropriate balance between accessibility and quality, the instructor must consider who they are teaching. Why are the students taking the class via distance rather than by traditional methods? Students that enroll in the distance learning classes are typically older with considerably more life and work experience. They may be enrolled to improve their financial standings, education may have been previously inaccessible or their daily situation (work, childcare) may make traditional courses inaccessible (Peters, 2001).

While distance learning may sound appealing to the masses, it is not suited to all students. As educators we should develop methods of qualifying students for distance education classes. Menager-Beely, (date) cites an attrition rate of 50% in community college distance learning classes compared to 20% in traditional classes. She found a simple survey could predict the success of a student fairly accurately. The questions collected information on demographic data and what the researcher referred to as task-based questions. Most informative were the task-based questions which included the students' perception of the utility, interest and importance of the course. The task-based questions had statistically significant correlations to attrition. The higher the ranking of utility, interest and importance, the less likely the students were to drop out. The stronger their responses regarding utility, interest and importance, the more likely that the student would remain in the class. Most of the demographic data did not hold any statistical significance with the exception of age and success in previous English classes. The older the student, the more likely they would be not to complete the course (2001). This seems somewhat surprising considering older students are more likely to sign up for classes per Peter (2001) It was not clear in the study why the older students dropped; one supposition was that since most of the older students were women they may have had family conflicts. The second statistically significant correlation of demographic data was the grades in previous English classes. The students were asked what their grade was in the highest level of English classes they had completed. The higher the grades, the more likely the student was to stay enrolled in the class. The level of English the student was at did not have a strong correlation to their success in the distance learning classes.

(Mebager-Beeley, 2001)

In addition to meeting student needs and qualifying a student's chance for success, it is critical to use great care in designing distance education courses. The research on designing CALL and distance education courses follow similar paths. While CALL can be used as part of a traditional classroom much of today's distance education programs are using CALL. The Internet is probably the most utilized method for distance education.

Reynard (2003) argues that Internet courses have advantages in flexibility and accessibility over other distance learning delivery methods. "It is the most cost-effective mode of distance delivery on this continent (North America) and, I would also suggest the Internet has the potential of being the most effective way to teach and learn at a distance in a computer –supported environment" ( p.1). Reynard offers several suggestions on using the Internet as an Instructional tool. Some of these include instructors having a clear understanding of pedagogy. This is mirrored in earlier discussions of CALL. An important benefit on Internet instruction includes the ability to allow students to scaffold. In the context of the Internet, scaffolding can be accomplished by using hypertext (links on a web page that take the user to another page or site) allowing to control the direction and outcomes of their study session. The Internet also allows for access to numerous contextualized texts that can be accessed simultaneously with online dictionaries and thesauruses. Similarly to Cannin-Wilson (2000), Reynard suggests facilitating learning communities to create relationships between instructors and peers: she further suggests that this communication provides additional context. (2003) Reynard recommends the following characteristics in designing Internet ELL distance learning courses: students should be allowed to direct their navigation and resource

selection; instructor intervention should be initiated by students and expedient in response; responses should use as many communication technologies as possible; dialogs should be maintained between instructors and students; and goals should be authentic language production (2003).

Similar to the research in developing CALL, Canning-Wilson (2000) states to facilitate successful distance learning, a class must address the needs of the learners and institutions, development and implementation budgets, and take the necessary time to plan the distance course. It is crucial for the instructor and learner to ensure there are clear communication channels between them. Instructors should be extremely organized as a distance learning class that is not in a logical order will cause great difficulties for the learner. The instructor should evaluate the modules and ensure they are pedagogically sound. Once the course is designed it is important that the students have the necessary resources (such as packets, books and passwords) and have the appropriate accessibility. Students taking a class delivered over the Internet need to have access at a speed appropriate for their task. An instructor must insure that the students have the proper technology training to succeed in the course. Finally the instructor needs to facilitate some sort of relationship so that students do not feel stranded and disconnected (Canning-Wilson, 2000).

While distance education may offer accessibility of education previously not available to students due to work schedule, family commitments or transportation but it appears that it can not be delved into lightly by the instructor. Current literature highlights the importance of careful and thoughtful implementation in order for the students to succeed and obtain their education goals. In addition administrators of

distance education must carefully balance the class between accessibility and personal contact, one extreme may lead to students feeling isolated to a point where they give up their studies while the other extreme may remove the benefits sought in utilizing distance education.

### **Summary**

A majority of the research in distance education and CALL focus on similar principles; the role of the instructor, the role of the delivery method (telecommunication, computer, video), and the needs of the students. Research in both areas stresses the importance of careful design and implementation and that practitioners should be aware that it is not just as simple as converting traditional course work to a computer mediated format. The fact that the drop out rate is significantly higher for distance learning classes in comparison to traditional classes (Mebager-Beeley, 2001) warns of the effort that must be taken in creating courses that will meet the students' needs as well as keep them engaged in the course.

In looking specifically at the success of CALL, many researchers have attempted to find sound statistical evidence of the benefits of CALL, but most studies show no conclusive evidence that CALL leads to improvement in SLA (Murray, 1999). The experimental and quasi-experimental designs for comparative studies have been criticized for not providing information about learners' experiences (Murray, 1999). Looking deeper into learner experiences could be essential for further development in this innovative field. Another criticism is that the studies are comparing different media without changing instructional content and strategy (Murray, 1999). This supports several of the CALL theories (Levy, 1997; Chapelle, 2001; Gillespie & McKee, 1999) that state

that CALL must be designed into the curriculum rather than retrofitted. Murray (1999) suggests that more reflective and descriptive methods be used for studying CALL. Research of the learner's CALL experiences is crucial to further research and development in the field. Perhaps in considering incorporating CALL we should not focus primarily on if student performance gains exceed those of a class without CALL but making use of CALL may address unique needs of a population of students previously overlooked.

It appears that instructors must accept that CALL does not provide a magic formula to accelerate language instruction and that its application will not fit within every program. However, there are CALL applications that seem promising, e.g., increasing students noticing as part of focusing on form. In keeping with findings from current research if instructors and developers design and use CALL in ways that will complement current teaching methods and recognizing features students distinguish as useful (error analysis and feedback) CALL in combination with distance learning may provide a vital role in reaching students that have little or no access to traditional ESL classes. As researchers focus on the effectiveness of CALL there appears to be little attention paid to the reflections of the students and educators that use CALL. Perhaps we should look not only at student gains in the terms of percentages and grades but also student and teacher satisfaction and other less tangible of effects of CALL.

### **Research Questions**

In general, research in distance education and CALL is in short supply. Within the current research available, reflections of students and instructors using CALL and distance learning in actual L2 situations are often overlooked. As educators we can

follow a protocol for effective distance education and CALL courses, but if students and instructors are not fully invested in the success the programs will likely languish. The motivation for this study is that there is very little investigation into the reflections of students or the instructors in an ESL programs that incorporate distance learning and CALL, which leads to these research questions:

- **What are the effects of a distance learning class on a community college ESL program?**
- **What were the learners' experiences using CALL in the adult ESL distance education grammar class?**
- **Were student gains acceptable to institution standards (did students achieve 70% or higher on written final)?**
- **How did students and instructors feel about student performance in the distance education setting?**

To answer these questions students were asked to complete a pre and post term survey, keep logs of the experience using the system. In addition as the course instructor I observed student logs of accessing time as well as keeping in close contact with them regarding their experience. At one point during the term a third party observer interviewed the two students.



## **Chapter III - Methodology**

### **Purpose**

The purpose of the study is to describe the use of CALL in a distance learning environment for an intermediate level grammar class. Specific questions to be addressed include: did the students feel the activities were useful, did they feel that they improved their grammar forms, did they spend more time studying independently and did they feel that the CALL activities fit well with the instructor's curriculum? Additionally as this was the first use of distance learning at Clackamas Community College, I am interested in how the class fit into the current ESL program and how the value was perceived by the students and instructor.

### **Setting**

The setting was a non-credit intermediate ESL grammar class at Clackamas Community College at the Canby satellite campus. Students are placed in the grammar class by scores from several diagnostic tests, including an oral interview (BEST Plus), writing assessment (CASAS FWA) and grammar tests. The community college currently offers five levels of grammar classes: beginning grammar, upper beginning grammar, intermediate grammar, upper-intermediate grammar and advanced grammar.

The intermediate, upper-intermediate and advanced classes are held as two-term sequences. Clackamas Community College (CCC) has two primary campuses, the main campus in Oregon City, Oregon, and Harmony, an additional smaller campus in Clackamas, Oregon. There are also several outreach centers in Canby, Estacada, Molalla and Wilsonville. The classes at the outreach centers are held locations that are part of a

different institution, for example the Canby classes are held at Canby High School. The outreach sites typically offer one to three levels of classes each term. Classes are held two nights a week from 6 – 8:50 with two classes being held at each level (the first from 6:00 to 7:20, the second from 7:30 to 8:50). For the purpose of this study I will be dealing solely with the Canby site and Canby High School. Canby offers three levels of classes each term. Students enroll in two classes at the appropriate level. Class sizes must be at least 14 to offer the class. Traditionally the outreach programs have offered the lower level classes. After completion, students must take classes at the main campus or at Harmony to complete the program. An issue that has developed within the institution is students complete classes offered at the outreach centers, but are unable to complete their studies due to difficulties attending classes at the main or Harmony campus due to transportation, work, or family commitments.

Originally, the concept for this research was to use CALL as part of the grammar instruction. CALL would be an integral part of the traditional class allowing students to gain computer competency and practice grammar skills. Unfortunately the enrollment was not sufficient to warrant an Intermediate class. At this time, I proposed to the college that we offer the class in a distance learning format. I structured the class as a hybrid, meaning that there was face-to-face time, with the instructor available, but not required, for the students. I was available for at least 30 minutes before regular classes, between classes and after the classes if necessary. In addition to the face-to-face time, the students had my cell phone number and email to make contact as convenient as possible when they were using the system outside of Canby High School.

The Canby High School campus was ideally set up to facilitate a distance learning class. As I was using the Internet to deliver the course, it was critical that the students had access to quality computers with high speed Internet. The Canby satellite center has a computer lab available. There are approximately 20 computer stations available from 6:00 PM to 8:50 PM on Tuesdays and 5:30 to 8:50 on Monday and Wednesday. The satellite center has a dedicated lab assistant available during the operating hours on Tuesday and from 5:30 to 6:00 on Monday and Wednesdays. The computer lab has ESL CALL software focusing on various skills including listening, reading, grammar and pronunciation. Students also have access to the computer lab located on the main campus in the library and at the Harmony Center. On the main campus there are twelve computers reserved exclusively for ESL students. The lab is open from 8:00 AM to 8:00 PM Monday through Thursday, and 8:00 AM to 1:00 PM on Fridays, a lab assistant is available to check out software and assist with software and hardware problems. At the Harmony campus, the lab is open from 6:00 to 8:50 pm Monday through Thursday. A lab assistant is available during those hours. All of the lab environments are quiet and comfortable.

### **Participants**

The participants were students that were eligible for the intermediate grammar class at CCC. Eligibility was decided by scores on the BEST Language Assessment test and results from an institutional grammar assessment. Five students were assessed at a level appropriate for Intermediate grammar. The students that met the criteria for the Intermediate grammar class were unable to enroll in a class for the first session in Canby due to their level being higher than the three courses offered. Prior to the offering of the

distance education option the students would either have had to attend the Harmony campus or the Main campus or not take a class.

CCC has one ESL program, so international students and immigrants are intermixed. Historically, students at the CCC Canby satellite campus are comprised primarily of immigrants. Students must be at least 16 years of age to attend, but most are over 21. Most students are from Mexico or Central American, and Spanish is their first language. The participants in the case study are students, who gave informed consent, and myself as the instructor. The participant's level of English was sufficient to answer questionnaires and write journal entries in English without the use of translators.

Of the five students eligible for the Intermediate grammar class, only two chose to participate. Both of these students also agreed to participate in the study. As an instructor I saw a need and other staff agreed that offering the classes via distance education could be a viable solution. The class was not listed in the course catalogs and we did not officially register students for the class. I believe this had an impact on the three students that left in not understanding the option of enrollment. Originally on the first night of classes all five students were informed that there would be only one class session of class, rather than two, appropriate for their level. At this time the students had to decide if they wanted to just participate only in the second session offered from 7:30 to 8:50 or withdraw. Three of the students choose to withdraw the term. The two students that remained were both immigrants. Table 2.1 contains demographic data for the two students.

**Table 2.1 Participant Demographics**

	Participant 1	Participant 2
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<b>Sex</b>	Female	Male
<b>First Language</b>	Polish	Taiwanese / Chinese
<b>Years in United States</b>	3	17
<b>Years of formal education</b>	13	12
<b>Age</b>	33	42
<b>Prior Computer Use</b>	No	Yes

As an instructor with familiarity with both students, I would classify each as highly motivated. Both students have had very strong attendance records, strong participation in class and complete assignments and assessments at a level between 85 – 100% accuracy.

My role in this study was as an active observer and instructor. I provided lab orientation and assistance during class lab hours. I was available via cell phone, email every day and in person from 5:15 – 5:30 in Canby every Monday and Wednesday to assist students with technical or academic related questions.

### **Materials**

The materials consisted of the CCC-recommended grammar textbook, *Grammar in Action Book 2* (date) and a web-based program (CALL system), designed by the researcher.

Also necessary for participation was access to a personal computer (Mac or PC) and Internet access. I provided each student with training on accessing the system and basic use as well as providing them with a short handout with instructions and screen prints of the system. The computers at the Canby location are approximately two years old and operate *FireFox* as the default web browser. The computers are equipped with CD/DVD players and speakers. All of the computers have internet access. The CALL programs used in the class were loaded on a web-server so students could access the site from the computer lab or via any computer with Internet access.

Originally this research was to investigate CALL used within the grammar classroom. When the focus changed to a distance education delivery, I had to quickly make considerable changes to the original design of CALL. Both models fit into the CALL as a tutor function as discussed by Levy (1998). Levy discusses CALL applications which are designed as tutors may assist guiding users through activities, providing feedback and supplying level-appropriate input (1998). An additional benefit of the tutor model is allowing for student autonomy in their learning, they are able to move at their own pace as well as repeat exercises as necessary. In my original model, the students would be allotted specific time during classes to study on the computer, which would utilize the ability to repeat exercises and give them the opportunity to study on their own time if they had access to computer resources. Ultimately, CALL took on a more central role as the face-to-face time with the instructor was reduced to a maximum of 33% of class time. In this model, CALL provided the students their primary lecture materials as well as supplying activities and testing with immediate feedback.

### **Design Process**

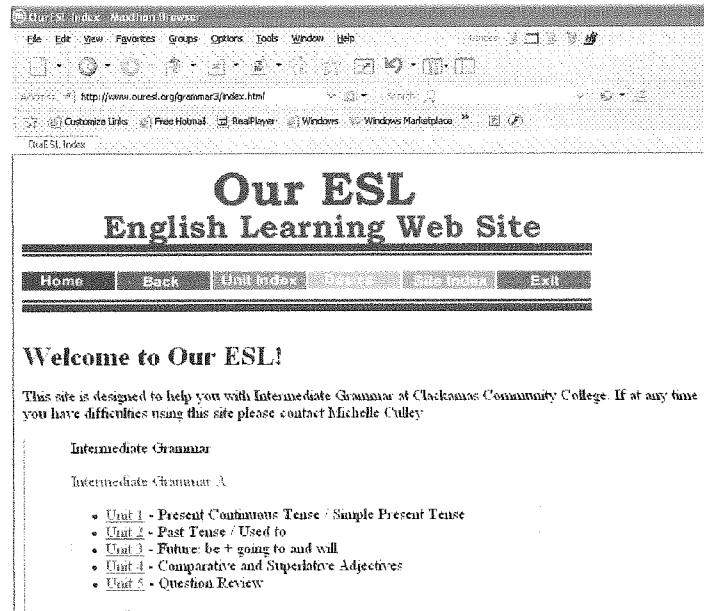
As suggested by the literature, the CALL system was designed as an integrated part of the curriculum (McCreesh 1993). CCC has a strict course outline of requirements for each class for instructors to follow. Using this course outline I developed the CALL system.

### ***CALL Design***

I first began with a design and layout, creating an internal organizational structure and naming conventions so that future additions could be made smoothly without changing previous files. Using my knowledge in website design from my previous professional

experience, I decided to keep the look of the website very simple as the following image illustrates.

**Image 3.1**



The background was white, free of any designs which could interfere with readability. The heading menu contained the name of the site and the navigation menu. The navigation bar contained the following links: home, back, unit index, basics, site index and exit. The navigation bar stayed consistent through the site. The only link that was not self explanatory was the “basics” link. Basics linked to a section with basic grammar knowledge that was covered in earlier classes but might need review, such as descriptions and examples of adjectives, pronouns and auxiliary verbs. I chose Times New Roman as the font since it is readily available on most computers; however I also allowed for a general serif font to be used if Times New Roman was not loaded on the computer. Keeping in mind that the students might have no computer experience, I strove to keep

the navigation and use of the site as straightforward as possible. The site was relatively “light”, meaning that I did not make use of graphics and other technology that would cause the website to load slowly; in fact I determined the web site should be usable even if a student had to use dialup Internet access. Exercises and quizzes were written using JavaScript, a programming language frequently used for web programming. I ended up using a freeware program called QuizTest (Pfaff-Harris, 1999). This allowed me to create homework and quizzes with multiple choice, true / false, short answer or long answers. QuizTest allows for many settings on each activity, for example some options include allowing the creator to allow the number of times the student completes an activity, set a time limit, send responses to the student (answers and / or grades). Additionally QuizTest allows the administrator to track usage online and check progress.

The CALL software will allow the students to print out assessments for their records while simultaneously sending results to the instructor via email. The CALL system tracked the time that and pages that the students accessed.

### ***Content Design***

I began each unit with an index of what topics would be covered. These topics were derived from the CCC course outline that instructors are required to follow. Following suggestions by Larsen-Freeman (2001) regarding form, use and function, I created a content pattern that I used throughout each unit to illustrate grammar points. Each unit began with attempting to have students to activate any background knowledge they might already have about the grammar point. For example, the first unit begins with comparing present tense and present continuous. I provided the students with sample



sentences using the grammar points and asked them to think of the difference in the meaning.

*I am driving to work.*  
*I drive to work.*

Next I provided an explanation of the different meanings and provided examples on how to create the grammar tense.

*Present continuous = simple present tense of the verb be + main verb +ing*

Sometimes graphics were used to help demonstrate a tense.

**Image 3.2**



**Simple Present Tense**



**Present Continuous Tense**

The third element was demonstrating the use of the grammar point.

*Present continuous for a present action – I am walking to the store.*  
*Present continuous for future - I am going to Florida in March*

The initial pages of each section were basically a replacement for the instructors lecture. I chose the form, function, and use method as described by Larsen-Freeman (2001) because I felt it was a good fit well with the use of CALL and distance education. Students are given a chance to analysis a grammar point prior to the explicit explanation, and then receive information on how to create it, how it functions and when to use it.

The content of the site then built on the new grammar point though additional exposure and practice opportunities. Pages contained more examples including varied formats of the grammar point. In the case of present continuous, examples were provided with different aspect, negative sentences and questions. Techniques such as highlighting and bolding were used to help facilitate noticing. Throughout the practice section, exercises from the book were assigned as well as links to online activities that were labeled as quizzes. A variety of question types were used in the quizzes including multiple choice, fill in the blank and short answer. At the end of each chapter were links to other websites for additional practice as well as a practice quiz. I required students to get at least an 80% on the chapter quiz before administering the final written test. All chapter tests and the final comprehensive exam were administered in writing. The CALL system included exercises that promoted noticing and focusing on the grammatical form and textbook exercises were represented allowing for additional repetition. The content of the exercises was similar to what was in the text. For the most part I created all the quizzes and web content to the same theme (work, neighborhood, daily routines) as the text. I attempted to create at least one exercise in each unit that required the student to answer questions about themselves using the grammar point.

Prior to each unit the student received a unit checklist. (See sample in Appendix C). The checklist listed each written assignment and test for the unit. There was a box to check off when an assignment was completed and another to record the score. The checklist also had a spot to record the hours the student used the system and space to keep their journal entries about using the system. Ideally all of the units would have been constructed prior to the beginning of class but due to the circumstances I did not have that luxury.

### **Research Design**

The project is a descriptive case study of the use of CALL in distance education intermediate adult ESL grammar classes at a community college over the period of one term. The case study method was chosen because of difficulties in creating an experimental or quasi-experimental CALL environment as cited by Murray (1999). In addition, Murray (1999) states the importance of reflective and descriptive studies to the development of the field. In this case study I will use a layered approach, as cited in Patton (2002), composed of data from the students' actual use and perception of CALL and instructor observations. The data was used to create a case that described the perceptions of students studying ESL grammar classroom by distance education using CALL.

### **Data Collection**

The purpose of this study is to create an in-depth investigation of students' experiences using CALL delivered by means of the Internet. Therefore, five methods are utilized for data collection: questionnaires, observations, student feedback, student performance on homework and tests and statistics from the CALL system. Data was

collected Winter and Spring Quarter, 2006. Two students participated in the study. Since this study does not attempt to show a causal relationship or generalize the experiences of the two participants or the researcher as the instructor, the three principle participants are adequate for providing a description of the experience of using CALL. The distance education class was open to all students at Canby that placed at the appropriate level in grammar competency. All students that qualified for the class were invited to participate in the class and the study. The two students that chose to participate in the class also participated in the study. The researcher was an active participant as the primary instructor and observer.

### *Questionnaire*

Two questionnaires were used to collect data for this study. The initial questionnaire (See Appendix A ) gathered demographic data, assessed student's previous experience and attitudes about using computers, CALL software, and their attitude towards incorporating CALL in their learning. The second questionnaire (See Appendix B ) gathered information on how often the students used the CALL system, if other software programs were used and their general attitudes about the software and computers. Both questionnaires were a mix of fixed and open-ended questions. As advised by Nunan (1992) every attempt was made to avoid leading questions and culturally biased questions. The first questionnaire was given on Monday of the second week to participating students. The second questionnaire was given after completion of the class.

### *Student Feedback*

Prior to beginning each unit the students were given a checklist to track their progress (See Appendix C). The checklist also contained spaces to record the time they used the system and record any observations. The purpose of recording the student observations was to get a more personal and in-depth look at the student's experiences during the term. Students were asked to log the date and time they accessed the CALL system and the experiences they had using the software. The information from the student feedback sheets provided more detailed insight into how the students used CALL and individual successes and hurdles they encountered.

### *Field Notes*

As the instructor, I kept a journal of experiences during the term. Initially, I planned to observe students during class but as the project morphed into distance education this became less feasible. Both students consistently showed up for the open lab from 5:30 to 6:00, so I was able to spend some time observing their usage. Much of my observations were from the communications I had from the students regarding what they liked and did not like. In addition, I kept a reflective record of my initial expectations of CALL and tracked student hours and progress using the software.

I enlisted a student working on her MA in Adult Education from Oregon State University to serve as a third party observer for both students during one open lab session. This was to try and provide an additional perspective to the observations. The MA student had been completing practicum hours with me in a different class for two terms. I had got to know her well and felt she would be able to provide a reliable third

party observation. I did not provide her with verbatim questions to ask but rather gave her some guiding questions and suggestions such as asking how they liked using the CALL application, their thoughts on how the class works in comparison to other classes, if they felt they were getting the necessary assistance from the instructor. I also asked her to watch them use the application and write down any thoughts she might have as to their comfort level and ability to navigate the site.

### *Student Performance*

In addressing the needs of CCC in evaluating the distance learning grammar CALL, I describe student performance. Data included are the amount of homework completed, percentage scores, number of online activities completed, number of times online activities were attempted, scores on online activities, percentage on written midterm and final.

### *Usage Statistics*

Each participant was assigned an identification to log onto the CALL system. The system logged amount of time each student spent using the CALL system, which exercises were performed and exercise results. The log files were able to track student's access and usage regardless of their location (lab, library or home). Data is stored in a log file (See appendix D) provided by the web service provider. All data collected as part of this research was backed up and stored in alternate locations in the event of catastrophe.

### **Analysis of Data**

By using several forms of evidence and perspectives, a clearer description of the students' experiences was formed (Wiggins, 1998). This procedure referred to as

methodological triangulation was employed rather than relying on a single form of evidence or perspective as the basis for findings, (O'Malley & Valdez Pierce, 1996). Relying on any one form of data may impact validity of the research. As stated by Stakes (1995), in order to create a rich and thick description, triangulation can be used to provide evidence from different perspectives. Data was collected from the five sources (questionnaires, instructor field notes, student journals and progress charts, computer statistics and a third party interview) and combined and compared for each student to report on patterns with characteristic examples of how using CALL in he ESL Grammar class impacted the student and institution. The data was also analyzed holistically to discover and define general trends. The data was used to be used to create a thick description (Lazaraton, 2003) of the experience and attitudes of adult ESL learners using distance education CALL in a grammar class as well as the impact on the students and institutions.

### *Questionnaires*

Data from questionnaires was tallied and summarized by student and by question.

### *Field Notes & Journals*

The information from student journals and instructor field notes was collected and coded for themes created by the researcher that become evident by careful analysis of the data. (See Appendix E for samples of codes evaluated.) To strive for reliable results, the data was analyzed and coded and rechecked to compare initial results for accuracy. The second data analysis was again preformed by the researcher.

### *User statistics*

Data from computer statistics were tallied by student and activity performed. This data will be compared with student journals to compare student recorded time and progress to system recorded time and progress.

### *Analysis*

In addition to the thick description of students' experiences of using CALL in the grammar class, performance gains will be analyzed. Because the acquisition of grammar is of great interest to the faculty, results from unit assessments and the final assessment will be compared to investigate if there is a correlation between the hours using CALL and student gains. Due to inability to control variables, the results from the statistical analysis will be descriptive only.

### **Validity**

As this study is not establishing a causal relationship but rather a description of students' perspectives and the influences on the students and the institution of using CALL in the grammar class in a distance learning environment many issues regarding internal validity will not be relevant. Steps that will be taken in regards to demonstrate internal validity will be the user statistics and printed assessment sheets from the CALL system. All attempts will be made to offer as many low inference descriptions as possible. Examples of low inference descriptions include data from questionnaires, assessment printouts and results from post-tests.

The primary process that will be used to demonstrate external reliability is triangulation by incorporating multiple methods of data collection (assessment sheets, journals, questionnaires, observations and test results). While the participant group may



be too small to make generalizations, the results may be transferable to similar classes. In addition, face validity was established by providing accounts such as the questionnaires, third party observation and notes from student journals.

### **Limitations**

Participation and attendance at the Canby satellite center has been historically irregular. Both students that chose to participate in the study had higher than average attendance records which may not be considered representative of a typical student. Conversely, distance education has not been previously offered from the CCC ESL program and many of the issues leading to loss of retention could have been remedied. While more data would have provided a more generalizable description of students' experiences and attitudes using the CALL system, data collected from a few or even one student is still relevant and noteworthy. Students did consistently participate in the journal writing portion of the data collection and most entries were very brief. Instructor observations and user statistics helped fill in potential gaps.

### **Implications**

Regardless if CALL itself does not increase grammar acquisition the use could provide additional opportunities for exposure to the target language as well as new technology. Development of successful distance education hybrid classes may provide opportunities for community colleges to reach a population of students that have not been able to attend classes due to work, family and transportation conflicts with traditional class schedules. Finally, this study has the potential to influence future studies in the area of adult ESL education.

## Chapter IV - Results

### The Class

This study took place in an outreach center located in Canby High School. The outreach centers accept students age 16 and older. The classes offered are typically beginning to lower intermediate and attendance is typically irregular with a higher attrition rate. The Intermediate Grammar A class was open to all students at the Canby outreach center that qualified by meeting several assessment criteria. The criteria included: Student Performance Level 4 determined by the BEST Plus (oral and listening assessment), CASAS Functional Writing Assessment (writing ability determined by scoring a free write after viewing a picture prompt) score of 2, and a score of 0-17 on the Level 2 in-house grammar placement test (multiple choice grammar knowledge assessment) *or* successful completion of Upper Beginning Grammar. Originally the class was to be taught in a traditional format. After the first night of classes only five students had enrolled and it was determined that there were not enough students to meet the minimum enrollment of 14 to offer a class. On the second night of classes we informed the five students that there would be one rather than two classes offered at their skill level. I then offered to option to participate in the trial distance education class. I gave all five students a demonstration of the application and a temporary password to allow them to access the system. I notified them that they would have an individual password and all necessary materials provided at the next class. The five students were also given the option of only enrolling in the one class from 7:30 to 8:50 or enrolling in day classes at the Oregon City main campus. The day classes did not work out with the students' schedules or additional commitments.

On the next night of classes, two of the five students returned to enroll in the traditional class as well as the distance education grammar class. The other three students did not return and have not since enrolled in classes. There is no data available for why these three students did not return. While the students were given access to the computer lab during open lab hours (5:30 – 6:00) and the during the first class session (6:00 – 7:20) they were not required to utilize this time; in fact I encouraged them to feel free and access the system at their convenience. I told them the system could be accessed from home if they had a computer and Internet access, a public library or any of the CCC computer labs. The students were required to cover the same chapters and meet the same objectives that were required for the traditional face to face grammar class (See the course guidelines in Appendix G) . In order to assist in assessing the student's progress in the new delivery format I administered written unit tests and a final exam that were similar to the exams given by other instructors in traditional face to face classes. The tests were closed book and were proctored at the Canby site. Both students were very eager to participate in this project. They were aware that it was the first time the class was offered and they might encounter problems with the technology and content.

The remaining content of the results sections outlines the data that was collected from the various collection methods including, questionnaires, student journals, computer logs, third party observation and instructor field notes.

### **Questionnaires**

Both students were given the pre-term questionnaire (Appendix A) on the same night that I distributed passwords, the access instructions and, the unit one checklist. The preterm questionnaire was designed to collect general demographic data as well as gauge

students' previous computer experience. The demographic information collected included first language, years in the United States, years of formal education, sex and age, marital status. The data helped paint a description of the students and their similarities and differences. One student was male (Wen) and the other student female (Lidia). These names are pseudonyms chosen to portray their country of origin yet protect their privacy. Wen is from Taiwan and spoke Taiwanese and Chinese as first languages while Lidia is from Poland speaking Polish as her first language. Their ages were not too dissimilar with both being over 30 but under 50 and both students had similar amounts of formal education (12 as compared to 13). One large discrepancy between the two was the amount of time they had lived in the United States and their family life. Wen has lived here 17 years and is single with no children, while Lidia has only lived here 3 years is married with children. While both students are very different in terms of demographic data they had both been enrolled in previous classes with the researcher and other instructors at the CCC Canby outreach center. Both were considered by the instructors at the Canby outreach center as highly motivated and academically disciplined students with much better than average attendance records. In reviewing the demographic information I would not classify Wen or Lidia as typical outreach students. The majority of students attending the outreach centers are from Mexico with less formal education. In addition, the typical student absences are higher than either Wen or Lidia had demonstrated in past classes.

The purpose of gathering previous computer experience was to determine how much training a student with no computer experience would need, if any, prior to taking the distance education class. From my previous business experience with software

training, errors in the technology tend to be more frustrating for a novice computer user as compared to a more advanced user, who probably has previous experience dealing with and trouble shooting technological issues. Similar to the demographic data both students had different backgrounds in computer experience. Wen had used computers for school while Lidia had no previous computer experience. Even though Lidia had no previous experience, she was very enthusiastic about learning to use a computer as part of participation in the class. In addition to providing me with information about how much help the students might need in using the technology, the information was also useful in making decisions about future design modification such as deciding if the interface was self-explanatory and how students adjust to multiple windows being used within the application. Table 4.1 contains data gathered from the pre-term questionnaire.

**Table 4.1 Pre-Term Questionnaire**

<b>Student ID</b>	<b>Wen</b>	<b>Lidia</b>
<b>First Language</b>	Taiwanese / Chinese	Polish
<b>Years in U.S.A</b>	17	3
<b>Years of Formal Education</b>	12	13
<b>Sex</b>	Male	Female
<b>Married</b>	No	Yes
<b>Children</b>	No	Yes
<b>Age</b>	42	33
<b>Previous Computer Use</b>	Yes	No
<b>Environment for Computer Use</b>	School	N/A
<b>Previous CALL experience</b>	Yes	N/A
<b>CALL – Applications used</b>	Listening / Reading	N/A
<b>Was previous experience using CALL helpful</b>	Yes	N/A
<b>CALL attitude</b>	Positive	N/A

The post-term questionnaire (Appendix B) was used to gauge students' satisfaction with the grammar CALL application, to have them estimate the amount of time they spent using the application compared to the time they estimated spending in a traditional class, and to determine their interest in future ESL distance education classes.

Both students stated that they found the class enjoyable (more specifics were attained from logs and notes of discussions with students), estimated time spent using the computer was between 3 and 4 hours a week, and found the class challenging but not too difficult. Wen thought he spent about the same amount of time per week as compared to a traditional class while Lidia estimated she spent more time on the distance education class. Neither student indicated that they tried other applications (although my receiving emails from Wen demonstrated this comment to be inaccurate). Lidia indicated she was interested in additional ESL distance education classes while Wen indicated he was not, though this information was contradicted in the comments made to me during discussions. As distance education is of interest to the faculty at CCC for reaching students that may not be able to attend traditional classes, students were asked what additional classes they thought might be appropriate for distance education format. Both students felt that grammar and writing would work well; Wen felt that pronunciation and reading would work well, while Lidia felt that pronunciation would be okay and did not respond regarding reading and conversation. Wen answered unknown for conversation classes.

**Table 4.2 – Post-Term Questionnaire**

<b>Student ID</b>	<b>Wen</b>	<b>Lidia</b>
<b>Was Class Enjoyable</b>	Yes	Yes
		New and interesting
<b>Estimated hours using Computer</b>	3-4	3-4
<b>Level of CALL</b>	Challenging but not too difficult	Challenging but not too difficult
<b>Comparison of hours to traditional grammar class</b>	About the same	More
<b>Try other ESL applications</b>	No	No
<b>What programs did you use</b>	N/A	N/A
<b>Other internet applications</b>	N/A	N/A
<b>Interested in computer classes</b>	Yes	Yes
<b>Is using a computer important</b>	Yes	Yes

Interested in other ESL distance education classes	No	Yes
Classes that would be suitable for distance education format:		
Grammar	Work well	Work well
Writing	Work well	Work well
Pronunciation	Work well	Work okay
Reading	Work well	N/A
Conversation	Don't know	N/A

### *Check Lists, Computer Usage & Journal*

Each student was provided with a checklist (Appendix C) prior to beginning each unit of the grammar book. The checklist had all of the homework and quizzes that were assigned from the book and those that were available online. The students had boxes to check off once an assignment was completed and a place to record the scores. The checklists also contained a section for students to track their times using CALL and write any comments about CALL. The purpose of the comments section was to be used as the journal for the researcher's records.

The information provided by the students from the first few units was more complete; as the course continued the students were more likely not to check off tasks, record scores and times, and add entries to the comment section. Despite the lack of recording on the student's part, the effort and time that went into the work stayed consistent or improved as the course went on. This data will be discussed in more detail in the field notes section of this chapter.

**Table 4.3 - Checklists**

	Assignments Recorded by Student	Total Assignments	Online Assignments Completed	Average Assignment Scores	Quizzes Repeated Online	Online Practice Quiz	Unit Final Score
<b>Unit 1</b>							
Wen	4	5	3	90%	1		91%
Lidia	5	5	3	95%	0		99%
<b>Unit 2</b>							
Wen	5	5	3	91%	0	70%	83%

Lidia	5	5	3	99%	0	85%	100%
<b>Unit 3</b>							
Wen	10	10	5	85%	1	85/90%	91%
Lidia	6	10	5	96%	0	**	96%
<b>Unit 4</b>							
Wen	11	11	4	85%	0	85/90%	N/A
Lidia	6	11	4	98%	0	100%	N/A
<b>Unit 5</b>							
Wen	7	8	4	89%	0	100%	83%
Lidia	3	8	4	100%	3	100%	98%
<b>Comprehensive Final</b>							
Wen	92%						
Lidia	99%						
** Student did not complete assignment							

Both students became more lax at recording scores as time went on. The checklist is still beneficial for instructor and students as it provides a clear indication of what tasks are required but it should not be used as an accurate portrayal of activity.

The computer server I used to host the CALL application was able to track the times students accessed the system and location. A sample of the computer logs are in Appendix E.

Data from computer statistics was tallied by student and unit studied. This data was compared with student journals to contrast the student recorded time to the system recorded time. The total amount of time each student accessed the system is of interest in comparing distance education to a traditional class where the student spends approximately three hours a week in the classroom for ten weeks. In analyzing the data, the students spent considerably less time using the computer compared to a traditional class. In addition to the CALL “lecture” and activities, the students were given a considerable amount of homework from the text. However when looking at student progress and their comments on the post-term questionnaire regarding their opinion of time spent in the distance education class in comparison to a traditional class, it did not



appear that there were perceptions that the distance education class required significantly less time commitment. Table 4.4 illustrates the time using the computers by the students and the actual time recorded in the computer logs.

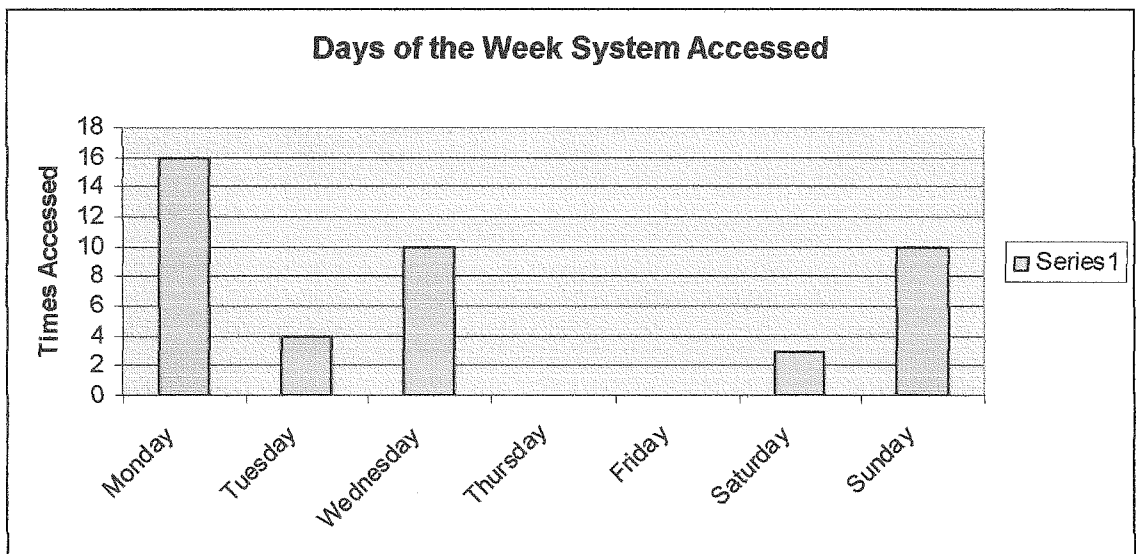
**Table 4.4 - Computer Usage**

	Recorded by Student		Actual Usage	
	Wen	Lidia	Wen	Lidia
<b>Unit 1</b>	4.5	2.75	4.0	5.25
<b>Unit 2</b>	3.75	3.25	3.8	2.8
<b>Unit 3</b>	3.0	3.5	2.25	2.8
<b>Unit 4</b>	1.2	**	1.1	1.0
<b>Unit 5</b>	1.2	**	2.6	1.6
<b>Total</b>	<b>13.4</b>	<b>9.5</b>	<b>13.75</b>	<b>13.45</b>
** Student did not record times.				

Other interesting data gathered from the statistic logs was when and where the students accessed the computer. While the logs do not reveal specific locations of access, I was able to determine access from the lab at Canby High School. For the first two weeks both students used the lab on Monday and Wednesday evenings exclusively. During the third week Wen called me to ask about accessing the site from other locations. From that point on, Wen and Lidia accessed the Grammar CALL several times from computers other than at the Canby High School lab. All access to the CALL application on Monday and Wednesdays were during the time the traditional class would have been held (5:30 – 7:30). The access times on by Wen on Saturday, Sunday, and Tuesday were between 1:00 pm and 4:00 pm. Lidia accessed the CALL system on two Sundays from around 11:30 pm to 12:30 am. Another interesting note is that both students missed

several classes yet both finished the CALL Grammar class in the appropriate amount of time. There was a point with no activity from Lidia for almost a week and then she completed two units within one week. Table 4.5 lists the numbers of accesses by day of the week.

**Table 4.5 Days of Week System Accessed**



***Comments (journal)***

The students' written comments (journal) was the weakest aspect of data collection. The comments section was never used to write questions or comments about the grammar lessons. We used the journal primarily to comment on errors in the lessons (instructor typographical mistakes) and to thank the instructor for making the CALL application available:

“Dear teacher ... For transpiration, the people used horses and wagons. I think it is (transportation)”

“Dear teacher Thank you so much to helping my homework and computer”

Lidia wrote a few comments in the first few units regarding the ease of the technology and requested additional online exercises a few times:

“Everything is working good in computer. Please give us more quizzes and maybe more exercises (unknown word) than that in the our book”

“Sometimes the mouse doesn’t work. I like quizzes. Program is writing very nice. I understand everything and it is help me to better work with book. Thank you Michelle”

Wen used the journal section almost twice as much as Lidia, and Wen’s comments continued through all five units, while Lidia quit making comments after the third unit.

Table 4.6 demonstrates the distribution of comments from the student journals and Table 4.7 gives a breakdown of from which unit comments were made.

**Table 4.6 – Student Comments**

<b>Comments from Student Journals</b>	<b>Wen</b>	<b>Lidia</b>
Questions regarding grammar content	0	0
Comments regarding errors in content (typos, formatting, etc.)	9	0
Positive comments regarding technology -	4	7
Positive comments regarding distance learning	1	0
Problems with technology	0	1
Requests for more online activities	1	2
Requests for additional classes	2	0
Comments thanking	3	1
<b>Total Comments</b>	<b>20</b>	<b>11</b>

**Table 4.7 – Student Comments by Unit**

<b>Comments by Unit</b>	<b>Wen</b>	<b>Lidia</b>
Unit 1	4	3
Unit 2	4	3
Unit 3	4	4
Unit 4	2	0
Unit 5	6	0
<b>Total Comments</b>	<b>20</b>	<b>10</b>

### **Third Party Interview**

A Master's student from the Adult Education program at Oregon State served as the third party observer with the two students participating in the distance learning grammar class. Cindy (a pseudonym to protect her privacy) sat with the students for one evening watching them use the application and talking to them about their experiences. The results from Cindy's observations were very helpful as the students talked about aspects of using the program that were not mentioned in face to face conversation or on the comments section. Following is a summary of Cindy's interview.

Both students were very happy with the class. They were most appreciative of the fact that they could use the application at their own pace. They both felt that in the classroom setting, other students were either waiting for them to finish or they were waiting for others to finish work. With the CALL they were able to take their time on the online assignments and repeat if necessary. In a classroom, a teacher may speak too quickly; with the computer they were able to reread the lecture as needed until they felt they understood the content. They described the class as being "ideal".

One drawback that both students mentioned was lack of interaction with other students and the times the class was offered. It was also mentioned that the times could be a hindrance to other students participating in the distance learning classes. This is an interesting comment as the class is offered "anytime" as a distance class. The two participating students generally used the computer at the same time, so there was some support from a peer. They also mentioned that they felt comfortable asking the instructor about computer problems or grammar clarification. Lidia had no computer experience prior to taking this class. She said that "the computer was challenging for me at first but

now being able to take this class and learn English and computers skills I feel more confident about maybe a work job, or going to college”. Lidia also stated that she was inspired to continue improving her typing skills.

The students stated that they would like to continue with the online grammar classes and both thought reading and writing would also be good classes for the distance learning format.

### **Instructor Field Notes**

Because I was teaching a class during the 6:00 to 7:20 time slot, I was not able to observe much of the students’ use of the application, though this is typical of distance education format. I was always available from 5:00 to 6:00 pm to assist with problems if necessary. Appendix H contains a few samples of instructor field notes. I also used this time to return homework and tests and provide feedback on progress. At the beginning of the term I sat down with both students to demonstrate how to access and navigate the CALL grammar application. I also gave each student a handout with instructions and screen prints (Appendix F). Table 4.8 outlines the primary comments from the face to face interactions between the instructor and students. Following Table 4.8 are specific accounts of the interactions.

**Table 4.8 Comments from students – Instructor Field Notes**

<b>Comments</b>	<b>Wen</b>	<b>Lidia</b>
Error Correction	2	0
Unable to access application	0	0
404 (broken links)	6	5
Comments / problems on design	2	1
Grammar– Student Initiated Questions	7	3
Grammar – Instructor Initiated Comments	8	4
Technical Questions	1	3
Comments on Application	1	3
Request for additional classes	6	4

Request for additional online activities.	3	9
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### *Error Correction Comments*

Error correction refers to students informing me of errors in the content (typographical mistakes). Most of this was relayed through the student journal by Wen though on two occasions he pointed out errors in our face to face interactions.

### *Accessibility*

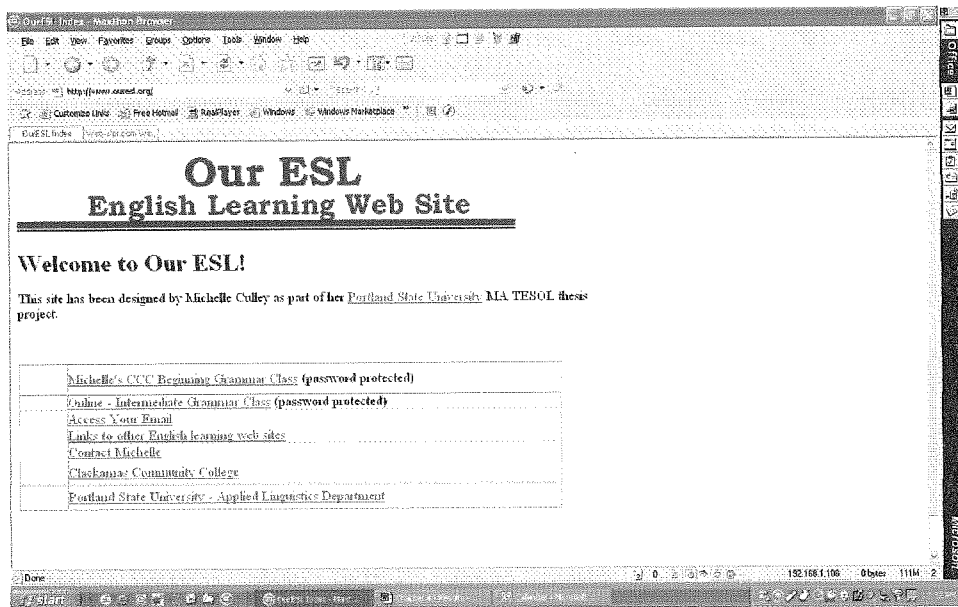
Prior to beginning this project I ran a trial of using CALL in the grammar classroom. One of the primary goals of the CALL application was to make it accessible regardless of a student's schedule; therefore making it accessible via the Internet was the most reasonable choice. In my observations of the trial run, I noticed that students were sometimes spending over 20 minutes trying to type in the URL of a website correctly and at times giving up in frustration. With this in mind I bought a domain name that I thought would be easy to remember and type in "ouresl.org". This seemed to help as neither of the students had any problems accessing the site. I had no comments from the students of difficulties accessing the site, or of times that the site was not available.

There were several times where the website had broken links (students click on a link to another page that was unavailable). In all cases the broken links were due to my not uploading a page to the Internet or keying the link incorrectly. I was able to quickly correct the problems. At no time did the students seem discouraged or frustrated by these minor technical issues.

## Design Comments

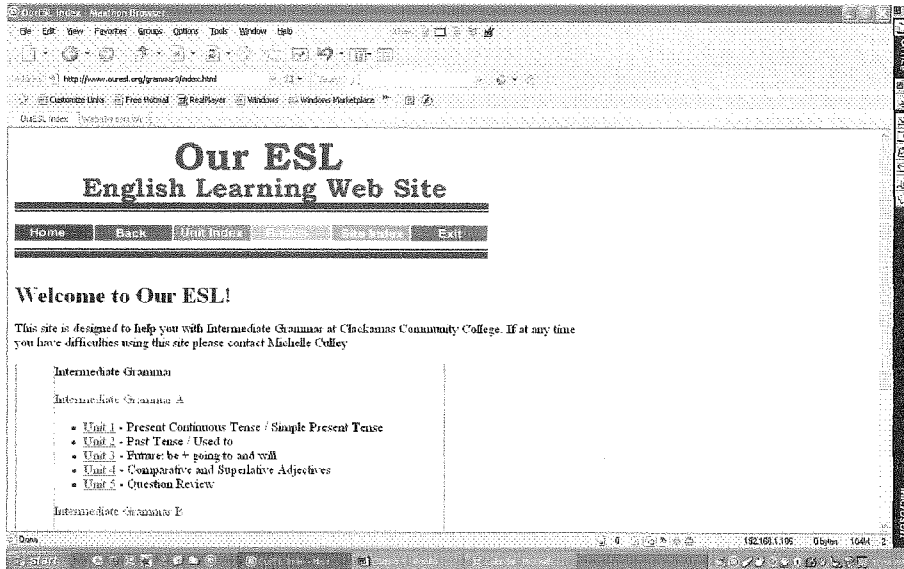
The site was designed with novice computer users in mind. Once logged on to the site the students were taken to a main menu where they would click on the appropriate option (Image 4.1).

Image 4.1



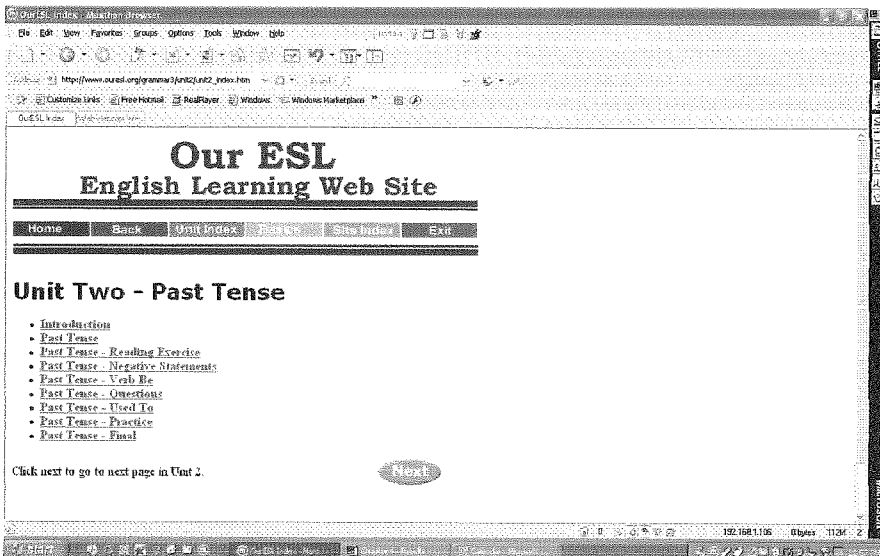
Access to the grammar classes were password protected. After clicking on the option for Intermediate Grammar, students were taken to the main menu for their class. At this page they could choose the unit they were working on (Image 4.2).

Image 4.2



Each unit had an index, so they would not have to page through pages they had already completed (Image 4.3).

Image 4.3





The website was designed to be very easy to navigate. All buttons were color coded with text on them. The rationale behind this is that purely graphical images are not always intuitive to the users. In addition there is no real consistency among applications on the graphical buttons. For example, Microsoft products tend to use a red box with an “X” to indicate close, Rosetta Stone, language learning uses a picture of a parachute to indicate exit, the Clackamas email application uses a picture of a door and an arrow to indicate exiting. The design did appear to meet the goals of being easy to use as even Lidia, the first time computer user, never asked for help navigating. Both students made comments in the beginning of how easy the application was to use.

*Comments on Content (grammar)*

Neither student put any questions regarding grammar in the comments (journal) section. They both seemed to prefer to talk about questions on homework or the grammar topics face to face. Wen had considerably more questions regarding grammar and half of them were on grammar aspects he had seen on different websites or in his leisure reading rather than what was being covered in the unit. In one unit the book had incorrect information (stated *whom* was to be used in subject position yet gave example in the object position) I did point out the error in the online “lecture” section, though Wen still looked to me for clarification on this grammar point. Having said this *who* and *whom* cause a great deal of confusion for native English speakers. Lidia only asked for assistance on grammar points 3 times, and all of these were confirmation checks on her knowledge rather than specific questions.

As the instructor, I initiated most of the grammar discussions with the students. After grading papers or viewing online quizzes I would sit down with Wen or Lidia and

discuss errors on grammar points that I believed they did not fully grasp. This type of discussion is very similar to what I do in traditional classes with my students on an individual basis after grading homework and exams.

### *Technical Questions*

Technical questions were very minimal. I was a bit surprised by the lack of questions regarding the computer, especially since Lidia had no previous experience. Both students asked about accessing the site from different locations and at different times. Lidia was a new computer user and initially had some questions regarding starting the web browser and using the mouse. Many times Lidia and Wen would be in the Canby High School lab at the same time and I would see Wen assisting Lidia with the computer and the two working cooperatively on assignments.

### *Comments on Application*

There was very little feedback on the application itself. Lidia was surprised and happy about how quickly she was able to use the system. Comments from both students were in regards to the ease of use.

### *Requests*

There were two types of requests. Both students requested to continue to take the grammar sequence online. The second form of request was for more online activities. Originally I assigned homework and projects from the book comparable to what would be done in class and as homework in a traditional class. I then added online activities to compensate for additional activities that a teacher may provide in class. In addition there was an online final for all but one unit. This was a practice test taken from the grammar book's test bank. I asked that students get at least an 80% on the online final before

taking the written final for each unit. Each student requested more online activities, though Lidia mentioned it in almost every discussion we had. Most of the online activities were very similar to activities from the book though the students seemed to prefer the activities online considerably more than completing exercises in the book. Both students mentioned they liked the automatic feedback, ability to redo the activity, and typing practice.

### **Student Performance**

In addition to the description of students' experiences of using CALL in the grammar class, performance gains were analyzed. Because the acquisition of grammar is of great interest to the faculty, results from unit assessments and the final assessment were evaluated in considering the success of this trial of using distance education and CALL in a grammar class. Because I did not have the students track the amount of time they spent doing homework and other studying off of the computer, it is impossible to compare the total time they spent completing this class in comparison to the time a student spends in a traditional grammar class. However, more important than comparing the time commitment is looking for performance gains and deciding whether the student met the course objectives. Table 4.9 demonstrates that both students met course objectives and passed with a 75% or higher on chapter and final tests. The only assessment score that was lower than 75% was from Wen in Unit 2 (70%) on the practice test, though he did improve on the Unit 3 final, achieving an 83%. What is interesting is that Wen repeated the practice quizzes for units 3 and 4 even though the scores were higher than the suggested 80% prior to taking the written test, yet on Unit 2 he did not retake the practice quiz as requested.

**Table 4.9- Assessment Results**

	Average Assignment Scores	Quizzes Repeated Online	Online Practice Quiz	Unit Final Score
<b>Unit 1</b>				
Wen	90%	1		91%
Lidia	95%	0		99%
<b>Unit 2</b>				
Wen	91%	0	70%	83%
Lidia	99%	0	85%	100%
<b>Unit 3</b>				
Wen	85%	1	85/90%	91%
Lidia	96%	0	**	96%
<b>Unit 4</b>				
Wen	85%	0	85/90%	N/A
Lidia	98%	0	100%	N/A
<b>Unit 5</b>				
Wen	89%	0	100%	83%
Lidia	100%	3	100%	98%
<b>Comprehensive Final</b>				
Wen	92%			
Lidia	99%			
** Student did not complete assignment				

## Chapter V – Conclusion

In this final chapter I will revisit the original research questions and discuss how the results answer each question. Following discussion of the research question I will address limitations of the study, validity and discuss implications towards further research.

### Research Questions

The first research question was: **What are the effects of a distance education class on a community college ESL program?**

As this study was a preliminary trial for distance education at CCC it is impossible to know for certain if offering the class will help retain the higher level students that are currently not attending due to the conflicts between advanced course offerings and their work and personal lives which is the ultimate goal. Both students that participated in the study continued attending classes the following term and are still expressing interest in continuing on with more distance education classes. Furthermore, the two participants relayed their experiences to other students in the following term and I have been approached by 5 additional students about enrolling in the online grammar classes.

In addition to generating student interest, this study did have an affect on the CCC program in that it initiated instructor conversations about the feasibility of distance education at the outreach centers and at the main campus. During and after the study there were several discussions at staff meetings regarding pursuing distance education further. With the approval of the two chairpersons and dean of the department I submitted a proposal to the distance education department at CCC for a grant to fund the programming necessary for creating two online distance education grammar classes and

*This is the  
so what  
question*

*more to after the discussion of research questions*

we have been notified that funding was approved. In the near future I will convert the current CALL grammar application and create the second class in the sequence on the CCC approved delivery method Blackboard (2004). We hope to begin offering the two grammar classes to the outreach centers in Fall 2006 or Winter 2007. The classes will enroll students from all of the outreach centers to attempt in meeting the department requirements for the minimum 14 person enrollment. The instructor will coordinate for all the sites and rotate on a nightly basis to provide face to face times for each student at each location. In addition each site's lab monitor will be trained in the basics of the system to offer technical assistance.

While at this point I cannot say that this will offer a solution to losing the higher level students at the outreach centers it an exciting opportunity to offer a new alternative that may create a significant impact on the outreach attendance numbers and satisfaction of the students.

The second research question addressed the experiences of the learners. **What were the learners' experiences using CALL in the adult ESL distance education grammar class?**

The data collected reflects a positive experience for both of the students that participated in the study. While the data collected from the student journals was not very informative, the third party observation and comments made directly to the instructor were very positive. The primary goal of the staff at CCC is to try to reach students that would not be able to take more advanced classes. While the students in the study would not have been able to enroll in the class if it were not for the distance education offering they were primarily focused on benefits of going at their own pace, receiving automatic feedback

and the ability to repeat assignments and quizzes online. Both students expressed they felt they accomplished the course objectives and would be ready to move on to the next level. Their test scores also provided evidence of their accomplishment.

Positive comments by the students included the online exercises and the immediate feedback received on the exercises and online quizzes. This fits with the research from McCreesh (1993) that discussed students' willingness to do more activities on a CALL application than in worksheet format. In addition studies by Nagata (1993) and McCreesh (1993) mentioned the importance of feedback to students.

For the next distance education offering, the classes will be delivered via Blackboard, the CCC authorized delivery method for distance education. Instructors are allowed to use other methods but cannot receive funding. Using Blackboard (2004) will make it easier to increase the amount and variety of online activities for the students, which will address the primary student request.

One of the negative statements from the third party interview mentioned that the time the class was offered was not convenient (referring to the 6:00 – 7:20 lab time). These comments were interesting since the distance education format actually allows the student a much greater freedom to study when and where they want. Both students did access the CALL grammar application at non traditional times and places. Perhaps the idea of distance education will need to be better explained to the students in future classes.

The third research question pointed to institutional demands: **Were student gains acceptable to institution standards (did students achieve 70% or higher on written final)?**

By all demonstrations from homework and tests the answer is yes. Both students easily surpassed the minimum requirements of a 75% to pass. In addition, Wen was administered the institutional grammar test after completing the term and placed above the level of the course completed in this study. Both students completed homework at a higher than satisfactory level and appeared to demonstrate spending an appropriate amount of hours towards the class and homework. In order to create an equitable comparison between the results from the final in this distance education class to the traditional class based class I used tests based on those used by two instructors that were currently teaching the intermediate grammar class in a traditional format. The format, content and quantity were the same. I primarily changed the wording of the questions. Wen received a 92% on his final test, while Lidia received a 99%. In addition both students received higher than the minimum 75% on all unit tests.

The final question addressed questioned the instructor and students' perception of performance: **How did students and instructors feel about student performance in the distance education setting?** As the instructor I was very happy with the student's participation, progress and final assessments. I believe the test scores are a true reflection of the students' progress. Both students seemed to go through a unit faster than if they had taken it in a traditional class setting but my perception was that they spent a similar amount of time on their studies. They appeared to spend larger chunks of time but then took breaks in-between the units. For example Lidia completed units 1 through 4 over the course of 7 weeks with one week having very little activity. Then she had almost two weeks with very little activity (family obligations) and completed the 5<sup>th</sup> unit and the



final exam at the end of the term. It was after one of Lidia's midnight sessions that she expressed her pleasure with the online system and ability to work around her family's schedule.

Both students indicated that they were happy with the class. As indicated in the post-term questionnaire, both students felt using CALL to learn grammar was challenging but not too difficult. More telling of the student satisfaction with their performance than the questionnaires or test results are their continuing requests to me to continue with more online classes.

### **Limitations**

Attendance at the Canby satellite center has been historically irregular. This may not be as great of a concern with the distance education delivery as students can more easily adapt their studies to their and their family schedules. Along with low attendance, the drop out rate also tends to be higher. In this study, both students kept in contact on a regular basis and completed the course. I do not believe these students represent what would be expected in a "typical" class. While more data would have provided a more generalized description of students' experiences and attitudes using the CALL system, data collected from the two participants is still relevant and noteworthy. As suspected, the students did not consistently participate in the journal writing portion of the data collection but the instructor observations, third party observations and user statistics helped to fill in potential gaps.

### **Implications and Future Research**

This study provides a unique perspective of using CALL in an ESL classroom by illustrating a descriptive case study of student and instructor reactions rather than

focusing on student gains. While individual student achievement is an important aspect of studying the usefulness of CALL, it is also crucial that future studies investigate other effects of CALL. For example, while previous studies of CALL that focus on student gains have not shown significant benefits in grammar acquisition the use could provide additional opportunities for exposure to the target language as well as to new technology. In addition to studying gains, there are many more aspects regarding setting and student motivations that have yet to be explored.

Most studies reviewed focus on university settings. There are many aspects of use in community based education programs yet to be explored such as; what are the motivations for taking distance education classes, how do retention rates compare to distance education in a university setting, what classes work well in a distance education format.

### **Considerations for CALL and Distance Education in the Adult ESL Class**

Some important elements of what made this first trial project successful was the ability to maintain some face to face contact with the students. I would highly suggest this continue to be part the distance education format for ESL. As the instructor, I made myself available via cell phone, email and at various times at the outreach centers. I can not stress enough that I believe this was critical to the students' success. As shown in the logs, there was very little in the way of asking for assistance or clarification other than in the face-to-face interactions. In addition, I found the checklists very helpful for the students and myself. It made clear the assignments for each chapter, and even if the students did not use them, they were available.

Future classes should contain more and varied online activities. I believe this will help to keep the students interest and increase exposure to the grammar point. While there was hyper-text available in the units (to define grammar terms) there should probably be more use made of this feature of the web application. In this project it was only used to define grammar points (what is an auxiliary verb). Use of the hyper-text allows the instructor to help students focus on form. Studies cited by Chapelle (2001) and Brett (1998) point to highlighted text increasing noticing of grammatical forms. Furthermore, De Ridder (2002) states that users are more likely to use hyperlinked glosses in comparison to looking at a gloss in a book. While I think it may have been an underutilized utility, neither student ever made mention of the feature.

Finally, one area that I fell short on was quality control. Both of the participants were very patient but some of the errors, especially broken links, could have caused issues for some students. Potentially, such errors could lead to students withdrawing from the course.

I am very excited about the prospect of creating a distance education program at CCC. I am hopeful it will open the doors to students that have been otherwise overlooked, not because the college does not want to help them but due to enrollment issues. Perhaps this will be a solution to help the students and the college.

## Appendix A - Pre-term questionnaire

### Students

1. What is your first language?
2. How long have you been in the United States?
3. Are you married Yes / No
4. Do you have any children? Yes / No
5. Have you ever used a computer before Yes / No –  
If you answered No, you have completed the questionnaire.
6. Do you use a computer at : (circle all that apply) Work          Home          School  
Other \_\_\_\_\_
7. Have you used a computer to study English Yes / No
8. If you answered Yes to question 5, what areas of English did you study on a  
computer? (circle all that apply)  
Pronunciation    Listening    Reading    Grammar    Vocabulary  
Other \_\_\_\_\_
9. Did you think using the computer to practice English was helpful? Yes / Neutral / No
10. Do you enjoy using a computer Yes / Neutral / No

## Appendix B - Post-term questionnaire

1. Did you enjoy using the computer to learn grammar? Yes      No  
 Comments:
2. If you answered Yes – about how many hours a week did you use the computer for learning English? 1-2      3-4      5-6      More than 6 hours a week.
3. Was the grammar software:  
             Too Easy      Too Difficult      Challenging but not too Difficult
4. Compared to a traditional grammar class do you think you studied grammar:  
             less hours      about the same      more hours
5. Did you try any other English learning programs during the term?
6. If Yes to 4, which programs did you use?
7. Did you use the Internet for other purposes during the term? Yes      No
8. If Yes to 6 describe some activities you used on the Internet. (example: email, language learning, research, games)
9. Would you like to take a class to learn more about using computers?
10. Do you think knowing how to use a computer is important? Yes      No  
 Why:
11. Would you take other classes in an online format? Yes      No
12. Which classes do you think would work best in an online format (Circle the answer you feel would be best)

<b>Grammar</b>	Would work well	Would be okay	Would not work well	I don't know
<b>Writing</b>	Would work well	Would be okay	Would not work well	I don't know
<b>Pronunciation</b>	Would work well	Would be okay	Would not work well	I don't know

<b>Reading</b>	Would work well	Would be okay	Would not work well	I don't know
<b>Conversation</b>	Would work well	Would be okay	Would not work well	I don't know

## Appendix C – Student Checklist

### Unit 1 Checklist – Intermediate Grammar

Done	Exercise	Grade
	<b>Exercise B on page 3</b> - answers only, you do not need to rewrite the sentence	
	<b>Quiz</b> – Rewrite statements as questions using the Present Continuous Tense	
	<b>Exercise C on page 5</b> - answers only, you do not need to rewrite the sentence	
	<b>Complete exercise D on page 6 &amp; 7.</b> Turn in complete sentences to Michelle.	
	<b>Exercise E on page 7</b> - answers only, you do not need to rewrite the sentence	
	<b>Review exercise F on page 8.</b>	
	<b>Quiz</b> - practice writing questions	
	<b>Quiz</b> - using adverbs of frequency to talk about yourself.	
	<b>Do exercise I on page 10</b> - Please write out the entire sentence.	
	<b>Optional</b> - for more practice on this chapter complete exercises A - C on pages 14-17.	
	<b>Exercise D on page 18.</b> You do NOT need to rewrite the paragraph. Just write the correct verb tense on a piece of paper in order.	
	<b>Final Unit Test – Written</b>	

**Please track the dates and time you are using the computer lab to study Intermediate Grammar.**

**Date**

**Time (5:45 – 7:00)**

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## Appendix D – Computer Log

198.236.13.30	Wen	[05/Apr/2006:18:47:04
198.236.13.30	Wen	[05/Apr/2006:18:47:08
198.236.13.30	-	[05/Apr/2006:18:47:08
209.85.32.23	-	[05/Apr/2006:23:52:13
216.145.17.190	-	[09/Apr/2006:17:28:26
216.145.17.190	-	[09/Apr/2006:17:28:29
71.111.136.254	-	[09/Apr/2006:23:51:04
71.111.136.254	-	[09/Apr/2006:23:51:04
71.111.136.254	-	[09/Apr/2006:23:51:04
71.111.136.254	-	[09/Apr/2006:23:54:19
71.111.136.254	Lidia	[09/Apr/2006:23:55:23
71.111.136.254	Lidia	[09/Apr/2006:23:55:23
71.111.136.254	Lidia	[09/Apr/2006:23:55:23
71.111.136.254	Lidia	[09/Apr/2006:23:55:24
71.111.136.254	Lidia	[09/Apr/2006:23:55:40
71.111.136.254	Lidia	[09/Apr/2006:23:55:41
71.111.136.254	Lidia	[09/Apr/2006:23:55:41
71.111.136.254	-	[09/Apr/2006:23:55:41
71.111.136.254	Lidia	[09/Apr/2006:23:55:47
71.111.136.254	-	[09/Apr/2006:23:55:47
71.111.136.254	Lidia	[09/Apr/2006:23:57:03
71.111.136.254	-	[09/Apr/2006:23:57:03
71.111.136.254	Lidia	[09/Apr/2006:23:58:10
71.111.136.254	Lidia	[09/Apr/2006:23:58:10
71.111.136.254	Lidia	[09/Apr/2006:23:58:10

**Appendix E**  
**Sample Coding for Journal and Observations**

**Student Journal**

Q-Gr	Questions regarding grammar content
EC	Comments regarding errors in content (typos, formatting, etc.)
P-Tech	Positive comments regarding technology -
P-DEd	Positive comments regarding distance learning
N-Tech	Problems with technology
R-OnAct	Requests for more online activities
R-AddC	Requests for additional classes
THX	Comments thanking

**Instructor Observations**

EC	Error Correction
NoAcc	Unable to access application
404	404 (broken links)
N-Des	Comments / problems on design
Q-Gr	Grammar- Student Initiated Questions
C-Gr	Grammar - Instructor Initiated Comments
Q-Tech	Technical Questions
C-App	Comments on Application
R-AddC	Request for additional classes
R-OnAct	Request for additional online activities.

## Appendix F

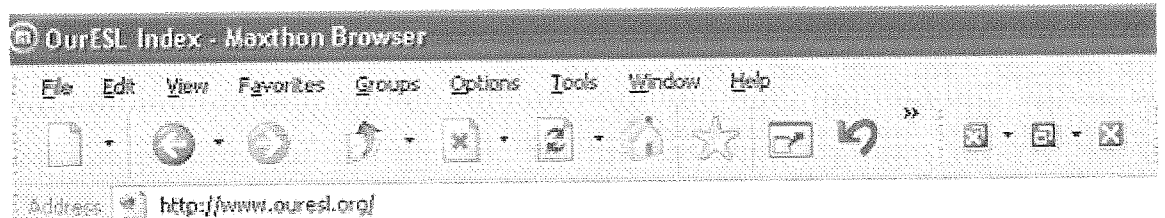
### Online Grammar Class Instructions

1. **Access the Internet.** From any computer with Internet access open the browser window. At Canby High School the browser is FireFox. The icon to click on looks like this:



If you are using the Internet at a different location such as the library or at home you may use a different browser such as Netscape or Internet Explorer.

2. **Access the website.** After opening your Internet browser you will type in the address (URL) of the grammar website. Most browsers have a place to type the address at the top of the screen. The address is [www.ouresl.org](http://www.ouresl.org)  
The window should look similar to this



3. **Enter your ID and Password.** Once you type in the address correctly you will be asked for your ID and Password. Michelle will have given these to you. Type them in exactly as they appeared on the paper Michelle gave you.
4. **Access the Online Intermediate Grammar Class.** After typing in your ID and Password you will see a menu. Choose:



Throughout the lessons are buttons to practice writing. The writing activities will be very similar to the quiz.

**Please contact Michelle if you have questions. Your feedback on this website is very important! Please feel free to tell Michelle what you like and what you don't like or if you have any ideas that might make website work better for you!**

## Appendix G

### COURSE OUTLINE

<b><u>NAME OF COURSE</u></b>	<b>Course number:</b>	ESL 042
Intermediate Grammar A	<b>Credits:</b>	0
	<b>Date:</b>	11/02
	<b>Revised:</b>	11/03, 02/05

**Institution:** Clackamas Community College

**Outline Developed by:** Anne Bachmann, Caroline Cate, Molly Williams

**Revised by:** Molly Williams, Anne Bachmann, Alice Goldstein, Kathleen Fallon, Suzanne Munro

**Type of Program:** Other

#### **Course Description**

This course is Part A of a two-part series of classes designed to present and practice the past tense, used to, the future tense, comparative and superlative adjectives, and questions in written and spoken English.

#### **Course Objectives**

This class will:

- introduce grammatical structures;
- model correct use of English grammar;
- provide practice in grammatical structures;
- give feedback on students' spoken and written grammar.

#### **Student Learning Outcomes**

Upon successful completion of this course, the student will be able to:

#### **Communication Skills**

Produce and/or comprehend the following grammatical forms in spoken and written English:

- past tense,
- used to,

- future tense,
- adjectives: comparative and superlative forms,
- questions.

### *Decision Making Skills*

- supply the correct grammatical form;
- choose an appropriate response from a variety of options;
- analyze text and identify errors;
- distinguish between wh- and yes/no questions;
- develop editing strategies.

### Interpersonal Skills

- work cooperatively in pairs or small groups;
- interact cooperatively with others;
- contribute previously learned grammatical knowledge.

### **Lifelong Learning Skills**

- monitor and modify use of grammatical forms in everyday oral and written communication;
- use strategies for text analysis and error corrections in written text;
- identify own strengths and weakness in grammar usage.

**Length of Course:** 33 class hours

**Progress Checks:** Unit tests and instructor-designed quizzes and exams

**Grading Criteria:** Pass/No pass

#### **Completion**

**Assessment:** Students will pass the class with an average score of 75% on all progress checks.

**Prerequisites:** Student Performance Level 4 determined by the BEST Plus, CASAS Functional Writing Assessment score of 2, and a score of 0-17 on the Level 2 in-house grammar placement test *or* successful completion of Upper Beginning Grammar

**Co-requisite:** ESL 070 Computer Lab (optional)

**Required Text:** *Grammar in Action, Book 3*, by Foley and Neblett

**Materials Used:** Overhead projector, blackboard, instructor-designed handouts,  
tape player, tape recorder

**Methods Used:** Pair work, group work, cooperative learning, problem solving

### Major Topic Outline

#### Verbs

past tense

used to

future

be going to

will

Question review

#### Adjectives

comparative

superlative



## Appendix H

### Sample Instructor Field Notes

Feb, 13, 2006 - Wen had difficulties forming questions. When over word order.

Feb 20, 2006 – Lidia requested more exercises online. Even though the exercises are similar to the book, she seems much more motivated by the ones on the computer. Not really enough time for this term, but for future classes.

March 8, 2006 – Lidia is complaining about having problems with the mouse. Can not duplicate not sure what is happening. Asked for more online quizzes.

March 13, 2006 – Wen is having a bit of problems using the modal in homework. Keeps wanting to conjugate verb following modal. Mentioned a few typos he had found.

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