

A Pedagogical Study of CALL: Observations, Applications and Corollaries; With a Reading Focus

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Summary

This descriptive research paper presents the development of a Computer Assisted Language Learning project that spanned a period of four years. It introduces historical backgrounding to CALL's past reputation and promotes recent alternative views. It focuses on the global introduction of CALL into a university SLA programme and is a 'user-friendly' documentation of application, assessment, change of pedagogy, a new application implemented in the remaining three years, and finally, observations of corollary, the questioning of the consequent results of application through a student questionnaire. The paper is written as a facilitating encouragement to professional teachers who are ready to experience CALL, or, as a shared experience for others who have the ability to remember their own simplistic beginnings in CALL and who have pedagogically gone well beyond. The main intention of this work was to enable students to access their own learning schemata in English, through CALL and to observe the function of CALL in relation to the acquisition of reading skills.

I. INTRODUCTION

A. A Beginning

Recently CALL, Computer Assisted Language Learning, has grown into an accepted and respected pedagogical contributor to teaching, particularly in the SLA classroom. Although this

technology has been prevalent for over 30 years, many practicing teachers have neither had the opportunity to experience the professional teaching of, nor implementation of this medium.

To understand what present attitudes towards the use of CALL in SLA are, one has to realise that great blunders were made in CALL's viability in the past and have therefore preceded, and in some ways 'dogged' its present use. It has been a vehicle for less than professional ethics where computer companies have 'caught on to' and promoted its usage via their 'complete and perfect packages' for the 'perfect learning' classroom situation, without any 'hands on' realisation of what it actually presented, nor proper research into what the educational needs were. Teachers endeavouring to become involved with this method of teaching, can gain strength from the practical decision making powers they have and can apply them to constructing a CALL programme. By respecting their own knowledge of, what does and does not work in their teaching environment with respect to content, and by inputting their personalised material into available software, CALL is no longer an alien project to pursue.

Dr. John Fanselow, Teachers College, Columbia University, strengthened my confidence and conviction in the pertinent status CALL has in SLA, and the conviction that I, myself, could implement such a programme. He comments in his book 'Breaking Rules: Generating and Exploring Alternatives in Language Teaching.' (Longman. 1987), (p.2), on the usual dependency of teachers on

external guidelines that can hamper further self discovery of what is congruent to a particular teacher in a particular teaching situation;

Judgments and prescriptions based on preconceived notions of good teaching given by outsiders, general in nature, and with no means to explore congruence between practices and prescriptions, obviously serve a critical function in teacher preparation and development.

As in my case, CALL was a new field in SLA and fortunately one in which I was unhindered by the 'normal rules' of approach. Thus, I could develop the programme without judgment by 'general prescriptions' and focused on 'specific descriptions' of what I considered important steps for students to gain the most benefits from CALL. 'Ignorance' they say is 'Bliss'. Therefore, I began by basing the programme on what I understood to be the needs of the learners, developed the work from my experiences as a learner and as a teacher, and applied them to CALL. My understanding and aims of what then happened over the next four years and after in this paper, depended on, as Dr. Fanselow says, freedom in observation and description;

And as a result to be free to generate alternatives unrelated to your preconceived notions of good and bad teaching, to serve as your own expert rather than to depend on those in authority, and to explore congruence between what you think you do, what you want to do, and what you actually do.

In other words, by setting out with realistic goals for a CALL programme, by seeking to explore the congruence between what is needed, what can be done, by viewing what actually happens without preconceived judgments, a teacher can observe and be set free to devise alternative methods of teaching. With the advantage of years of rational ESL or EFL experience and an open perspective of what could develop student's skills in SLA, plus an interest in using computers in the

classroom, teachers have the power to implement a CALL programme. By always remembering that new developments in instruction, such as starting a CALL programme, present an ongoing learning situation for the teacher and students alike, by reminding oneself, that changes can be made to rectify a programme when needed, the newly introduced instructor is then given the flexibility and courage to pursue the teaching of CALL. Decide what expectations fill students' needs, and then even more important, have the will to try.

B. A History of Attitudes Towards CALL

As Patricia Dunkel described in her introduction to 'Computer Assisted Language Learning and Testing: Research Issues and Practice.' (Newbury House. 1991), the role of CALL, Computer Assisted Language Learning, has for the last thirty years swung from great popularity to open animosity and rejection by educationalists. She noted that Maddux (1988) expressed concern with the growing 'backlash' of public and professional attitudes towards educational computing. This, Maddux observed, developed from the mid-1980's and was due to the unwarranted 'hype' of "unrealistically extravagant and unsubstantiated claims that have been made by some educational computing advocates" (p.8) .

Penderson (1987) cited in Dunkel (1991), (p.6) stated that the language laboratory of the 50's and 60's is now looked upon as "an unfortunate venture that resulted in a loss of credibility for language education and a growing suspicion amongst teachers about the value of mediated language teaching in general" .Dunkel related Stern's beliefs (cited in Pederson, 1978) that a major factor for this suspicion grew due to the introduction of the medium without previous or on going systematic research to find out the best usage for language learning nor proof that the software achieved it's designed results.

In 1989 Hart (cited in Dunkel, 1991) was

reporting negative reactions to CALL and CAI, Computer-Assisted Instruction, due to:

- (1) the huge amount of micro-computer hardware and the "amateurishly" made software,
- (2) the non-existent computer training of L2 teachers.
- (3) the unfortunate attitude by L2 administrators to "recognise" CALL as a technology that has viability in language learning.

B. Response to Negative Attitudes to CALL

The field of CALL has in fact benefited by the aforementioned realistic criticisms in that, educationalists involved with developing courses in Second Language Acquisition through CALL must remain aware of 'why' and 'where' problems arise within, and without, their particular projects. Only through extensive narrative reviews or meta-analytic reviews can a programme be evaluated to show a significant effect on the learners acquisition of language. In the work presented here, I will attempt to relate how the course was devised, the changes that came about, and my final analysis of the success or failure of the programme based on the students responses to a questionnaire.

A major argument against the use of CALL that I have come up against, has been that; a computer can't and should not replace the role of the teacher in the classroom. I absolutely agree, but does that necessitate the irradiation of computers completely from any role in language learning? A rhetorical question in response might clarify my position. Do not most professors now use a computer almost daily as an aid to their own research, or lesson preparation, or data collation?

C. A Philosophy on the Use of CALL

As in other recognised SLA methods, such as Caleb Gattengo's use of cuisenaire rods or his series of Words in Colour charts, or James Asher's Total Physical Response, built around the coordi-

nation of speech and physical (motor) activity linked to the "trace theory" of memory, these are skilled developmental 'three dimensional' elements which can aid in learning a second language. Why the use of computer assisted learning is not any more viable than these, is a question which needs support.

Here I propose: A computer is a 'tool' that can be used to augment, and enhance an existing curriculum by giving the students an opportunity to practice in developing skills beyond that which they acquire directly from the teacher in class. A different dimension, perspective, manipulation can, through a changed media help a student understand the subject more globally, by looking at it, and working with it, from a different angle of perception. A computer is a TOOL and one our students need to acquire a degree of competence and skill in, in this day and age. Why keep them from learning and developing, just because we, ourselves were not all brought up in the computer age and may have feelings of inadequacy with this technology? Not all students like learning mathematics and may never have to use a logarithm ever again in their entire lives. Does that mean they should not be given the tools required to add? Thus, however simple a CALL programme is, were it not better that students are given the skills to manipulate their emerging English through such technology, than never to experience CALL at all? In my work with the students, I found that the majority were positive about their experience with CALL and the opportunity.

Again, I quote from Dr. Fanselow's book 'Breaking Rules' (p.388) concerning the change of mediums. Dr. Fanselow justifies in logistical and pragmatic language, a clear defence of Computer Assisted Language Learning. He lends healthy weight to my beliefs when persuading those who would reject CALL as a viable medium.

Using a typewriter, word processor, or computer keyboard and terminal screen for reproducing the 'linguistic visual' medium is

less widely advocated... Electronic and mechanical reproduction make use of the 'linguistic visual' medium... When assigning students out-of-class work, requesting they reproduce with typewriters, word processors, or computer keyboards will not only provide a clear alternative, but will also enable some to master the keyboard, help others to have experiences close to those required in some jobs, and show others a way to devote out-of-class time to language development in a different way.

It is here, that Dr. Fanselow would disagree with my stated philosophy, as I have presented the computer as a TOOL for learning, which terminological usage is usually visualised as an exterior medium for learning. Defined, a TOOL is: any instrument such as an axe, hammer, spade, etc., for doing special jobs. (Longman's, Active Study Dictionary. 1983.). This alone could deter any lexicographer from pursuing or using this terminology further in educational jargon. In the vernacular TOOL has a more user-friendly meaning and that was my intent. If considered viable, a TOOL can be used or not, at a person's discretion. A sense of descriptive 'choice' is presented with the term TOOL and one which is more likely to be conducive for use, than a prescriptive one.

Whereas, Dr. Fanselow includes CALL as 'part' of his beliefs about using the idea of 'Comprehensible or Optimal input' (Krashen 1981a; 1982), and within his own classification of Mediums (pg. 400), as a; linguistic visual electronic medium= I've, I used the term TOOL. I would wish that all educationalists agreed with CALL being a 'part' of learning, as I do, but public and institutional attitudes to CALL are not so open to acceptance. By using the term TOOL, I intended to make CALL more palatable for those who would consider a TOOL less infringing or more innocuous, than as an intrusive PART of their 'Complete Cycle of Teaching'. My intention is to have professional teachers consider this Medium in a light

that is NON-threatening. My ultimate goal is to have CALL accepted, and then through personal experience by others, it can be viewed as an integral part of SLA teaching and experience. As Dr. Fanselow noted in Episode 18, page 406;

"Most important, by considering mediums as part of a network, we see their inter-relationships more clearly."

It is by looking at all the components of teaching that are within our grasp and observing the interplay of mediums, one upon the other, that we widen the possibilities for Second Language students to fulfill their personal potential for learning. Our work in education is to help students equip themselves for what ever they choose to do in life.

D. A Personal CALL Experience

My comprehension of CALL, came from my own personal experience of organising and developing, a CALL programme at a university for four years. The project was administered with the guidance of the members of staff in the Audio Visual Department without whom I could not have logistically run it.

For this paper, I decided to accumulate data from a questionnaire. The importance or non-importance of the programme was obtained from reflections from the most significant factor involved, the STUDENT'S reactions to what I tried to do. Through the years, I have polled my students on their opinions and, subsequently changed the programme after the first year. The information from the Questionnaire will be the main thrust of this paper, specifically from the aspects attitudes towards CALL. and reading.

E. Aims of the CALL Programme

My aims for CALL were multifaceted throughout the running of the programme, as I was concerned with developing the programme to it's fullest extent, where ever I discovered it was leading to, but here I will be focusing on IF, HOW,

and WHETHER CALL played a significant role in helping students improve their reading, vocabulary acquisition, and how much did it influence the student's learning of English in the classroom.

II. Description of the CALL Programme

A. The Teaching Situation

In April 1988 I was hired as a contract teacher in the Language Department at a women's university in Tokyo. I was requested by my Head Professor to develop and organise a CALL programme based on the presence of Apple 2 computers on campus. As later pointed out to me by a new instructor, I was at that time, a computer illiterate. This challenge was one which I took up with trepidation, but I can only thank Professor Louis Levi for giving me this opportunity to grow professionally and personally.

My motto was, if I, myself could learn how to use the computer, so could my students. Also the best way to learn something new is to have to explain or teach it to others, and so my education in CALL began.

B. The Dictates and Logistics on which I built the programme.

1. All Language Majors in their freshman year were to take this course. It was a weekly compulsory addition to their English classes.
2. I had 6 Apple computers to facilitate all the freshman students. In the second year I had 8 more added to the programme, making 14 computers and 4 printers.
3. I had to organise, arrange, and present a condensed instructive orientation to all the Language majors.
4. Access to the Language Laboratory was from 9:00 a.m. to 5:00 p.m. and was not available for use outside those times for security reasons.
5. All the material would be taken from and relate directly to the syllabus designed by my

Head Professor.

6. To ensure that the programme would run smoothly, the students would have to be independent learners, working within a firmly designed framework that presented clear instructions and guidelines.

III. The CALL Programme's Objectives

- To compliment the 1st year Language Major Freshman course.
- To encourage and implement Eng/Eng Dictionary skills.
- To increase vocabulary skills and acquisition.
- To teach computer skills.
- To teach word processing skills.
- To improve English reading skills.
- To improve English sentence writing skills.
- To give feed back to the students on their progress by continual self assessment by weekly item testing.
- To supply an autonomous learning situation and encourage self instruction skills.

IV. Designing the Programme

A. The First Year

The particular emphasis and question in the department was, how to help students expand their vocabulary acquisition. I decided to focus on students developing their own personal dictionaries through the programme Wordstore (Wida; Acorn BBC). The vocabulary items were chosen by the students themselves, from the material used in class, and from any other exterior source where they found vocabulary items they wanted to study. Each student was given a pre-programmed disk that had the capacity to store up to 1000 entries, which took the form of inputting a vocabulary item, followed by the English definition, and then re-used in a contextualised sentence. After the student had completed this entry, she was able to test herself. A random definition

was displayed and she had to input the keyword.

After one year, I asked the students for their feedback and found that the majority found it was a useful programme, but that it was not very interesting, so it appeared that I would have to expand the range of activities during their weekly computer times. Also there was the problem of the number of errors discovered after students work was printed out. These either came from a lack of typing skills or lack of attention when inputting items. As the programme was going to change and the input of vocabulary items would be cut down, I couldn't address this problem as fully as I intended to.

B. The Second, Third, and Fourth Years

The next stage of developing the programme was more difficult and complex. The basic orientation which included Letter Hunt (CUP; Acorn BBC, Spectrum), a letter discrimination game to increase keyboard skills was intact, as was Wordstore. A 26 lesson timetable was devised for the complete year and then, 26 weekly worksheets were designed which introduced the vocabulary items for Wordstore in direct correlation and timing to the 10 Chapters they studied through the year. I then input all the texts from our Language Major 1st Year syllabus into the Story Board, Codebreaker, Cloze Master, and Choice Master programmes.

Here I must add, the students due to the yearly academic calendar, only completed 20 of the lessons and in fact, we, the teachers were only able to cover 2 less of the original teaching units.

Each weekly worksheet included a list of new vocabulary to input and test, and 2 other activities from the above programmes, which also necessitated students to enter a score. At the beginning of each week the sheets were put out in the laboratory and removed at the end. Also the sheets were not packaged altogether into one folder for the students. I decided that this would encourage the students to do their work regularly,

any time during that week, and help the learners get used to entering and working on CALL in the lab each week. The temptation for students to leave work until later would mean chaos at the end of the year, and I wished them to get into regular study habits, right from the beginning. The completed work-sheets were filed by student number into a entry tray that was collected on Fridays. Late work was not accepted and a record was kept of who missed a weeks work. I received all the work sheets and then could keep abreast of who was not attending and why. This I believe, helped the students to become consistent in their CALL work.

This is, at the most, a very brief description of the complete programme, but necessary background information to understand the work students were involved with.

V. An Analysis of the Effectiveness of CALL

Individual Learning and Reading Skills in CALL

In SLA research, there has been more recognition and stress placed on the importance of individual learning opportunities and learning styles. CALL is a medium where students could be given these opportunities and extend their interaction with the English language. At my college, we were thoroughly aware that the amount of exposure time to SLA was extremely limited for our intended learner achievement level. Students were receiving three hours of instruction per week in the classroom, plus regular and extensive homework assignments, but we also wanted the means to further increase the time students were involved with developing their English language skills. CALL represented a different and viable Medium with which to do so.

Dr. Wilga Rivers in her book "Communicating Naturally in a Second Language: Theory and practice in language teaching. (Cambridge University Press. 1983) (p.82) reflects the concerns in SLA about individual student learning opportu-

nities and in particular, the questions I was asking myself at the time, as to who my students were. Could CALL really cover all the needs of my individual learners? How could I help the students approach an individual, autonomous learning Medium through CALL? Dr. Rivers questions were posed much in line with my own direction of thought;

Who are our learners? How do individuals learn? What are their personal learning strategies? Second language teachers became wary of presuming they could teach a language and began to seek ways in which students could be given opportunities, situations, and time to learn as their individual proclivities permitted.

In designing the CALL programme, I specifically did not have the students work in groups or pairs, except in the Orientation class where they discover in 2's and 3's the very basic commands needed to operate the Apple machines. The reason for this was, I intended the students to develop their own relationship with the computer and develop their own learning strategies in their own way, in their own time, and pace without the pressures of keeping up with, or having to wait for others to complete a task. Within each worksheet, different kinds of tasks were asked of the students, so if one was too challenging, the student, could look forward to one that was more to her liking, or to a challenge that supplied her with more self confidence. I wanted the students to be able to apply the same attitude and self-experience towards their reading of all the instructions, research, and inputted work. It was an autonomous strategy to increase their autonomous skill in reading for understanding. They needed time to be on their own to develop this skill and through individual CALL work, they were given it.

The holistic premise I then took, was to design a programme that would give the students time, experience, a certain amount of control, and self-reward. The key word 'try' was primary in my

endeavours to present the learners a way through CALL to SLA. In reading further (pg.82), Dr. Rivers presented three accepted or recognised approaches to individual learning; The Silent Way, Suggestopaedia, which I have already mentioned, and Community Language Learning. She described these as having the same qualities, as I held as priorities for my programme.

Although Dr. Rivers presents reservations about the use of CALL, her definitions reflected my own aims for the CALL programme, where, I state again, the learners worked on their own, within a structured framework, at their own speed, given access to immediate self-correction and testing, in their own time, and with little interference from the teacher. Individual learning-Hypothesis formation and testing, is encouraged and is an integral part of CALL's application in SLA. Dr. Rivers definition, lays great stress on the development of individual opportunities and learning styles and these concisely reflect the same aims I worked for, while developing the CALL programme. Therefore, I would hope that given these being the same criterion for CALLs. intentions, Dr. Rivers would look more favorably at the viability of CALL.

Equally so, Frank Smith in "Reading Without Nonsense" (Teachers College Press. 1985) devotes Chapter 9 to a critical assessment of the use of CALL with respect to reading, an aspect of this paper. He does comment though (pg.157) that;

Computers offer a number of indirect advantages to teachers of reading-when they (the computers and the teachers) are not being used as teaching machines,... Computers can also stimulate reading on their own account. Children interact with words that appear on the screen as they use a computer... But it is as a tool for writing that computers can most help reading. It is impossible to treat reading and writing separately, whether in theory or in practice... Computers help everyone to write-authors and secretaries, experienced

practitioners and beginners. And what helps writing does more than involve reading; it helps and promotes reading.

Frank Smith's words give germane weight, unbeknowingly, to mine. Here with respect to CALLS ability to involve the learner in an individualistic pursuit of SLA, there is definite reason to believe that the skill of reading is also developed and enhanced. My hypothesis and conjecture on the amount of necessary reading 'for information' involved, while students were engaged with the CALL programme by Dr. Smith's assessment, are therefore somewhat substantiated. He also uses the terminology TOOL with respect to CALL, as I do, but in this case it is a definite endeavour to exclude CALL as a 'teaching machine', and therefore put it in an area outside of learning where Dr. Smith's theories place it.

To understand the effectiveness of CALL on reading, one must be aware of the different kinds of reading involved. Here I will present a formulation of reading skills involved in CALL from CALL specialists that define and explain my own findings. In Christopher Jones and Sue Fortescue's book 'Using Computers in the Language Classroom', Chapter 5, The computer and reading. (p. 31) the three main ways in which computers are useful in helping language learners develop reading skills are characterised as;

1. Incidental reading or Reading for a Purpose.

Almost all CALL programmes, whether orientated specifically towards reading or not, involve the learner in reading text for a real purpose: the successful completion of the activity.

The students by reading each weekly worksheet, reading and inputting the new vocabulary item, researching and reading its definition to wordprocess it, reading and creating a sentence using the word in context, proofreading the work on the computer screen for errors, following the

instructions on the programmed disks to complete the task involved e.g. Letterhunt, reading and writing the scores achieved from each task set, and successfully finishing the activities, all represent the integration of reading for a purpose or incidental reading skills in the CALL programme.

2. Reading Comprehension.

Traditional question-and-answer CALL programmes can be used for reading comprehension as well as grammar and vocabulary development.

The Choice Master programme used this form of questioning in relation to sentences with grammatical errors where the student had to choose the recognised use of an English structure. This is very much like the kind of "error diagnosis" Professor Leslie Beebe developed in her SLA course taught to Columbia University Graduate students.

Ann Raimes refers to The Control-to-Free Approach in 'Techniques in Teaching Writing.' (Oxford University Press. 1983) where the process of student self-correction begins much in the same way, and now is unfortunately considered old fashioned, as does the programme Choice Master. In the CALL programme this was achieved by reading through a set of three sentences where the students choose the one most appropriate. Here is Raimes description of what the method basically is;

In the 1950s and early 1960s, the audio-lingual approach dominated second-language learning. Speech was primary and writing served to reinforce speech in that it stressed mastery of grammatical and syntactic forms... They work on given material and perform strictly prescribed operations on it... This approach stresses three features... grammar, syntax, and mechanics.

Such guidance would appear archaic in present SLA research. I believe, there is room for re-

assessing the negative reactions to such language instruction. In the next ten—twenty years, I expect that the Control-to-Free Approach will come back into favor again, renamed, with some new terminology. I would prefer to see the inclusion of the valid aspects of different methods and approaches in SLA rather than professionally see, the wheel re-invented and the huge pedagogical swings from extreme to extreme. Therefore, to give students the choice of trying out their skills in grammar, syntax, and mechanics, in a simple, re-triable form as in CALL, without the fear of rejection, by a class or by an instructor, is viable even now in the 90s. I have watched my students work through this programme with less fear than expressed in the class room, because it was an opportunity for the learners to ask and re-ask if what they were doing was appropriate or not, and after making a decision, they were quickly given the answers. What I witnessed over the years was a new freedom given to the CALL learners, where they were guided, but also given the chance to choose what they thought was right, self test, and then do self-checking-Hypothesis formation and testing.

3. Text Manipulation.

There are a number of ways in which computers can manipulate continuous text which involve the learner in close study of the content and structure of text.

Storyboard and Code Breaker used this form of text manipulation. Storyboard presented the same text as used in the class room with all or as many words deleted from the text as the student desired and a number of XXXXX replacing the deleted word to show the number of letters the word contained. Students would either guess the missing word by reading the contextual sentence or replacing the word with the appropriate form from its grammatical positioning in the sentence or by recalling the text from the classroom teach-

ing of the particular unit.

Code Breaker introduced the student to words in code and the student would break it by discovering the placement of vowels and consonants. Following that, the student discovers the other words by finding congruence with the word they had deciphered.

All three of the above reading skills were necessary, used, and performed during the weekly CALL programme. This explanation from the teachers viewpoint as to the great extent reading is part and parcel of the students work is presently concluded. I will expand on these skills later when discussing the students reactions.

APPLE C.A.L.L. QUESTIONNAIRE

- (1) Circle what year you are studying in now.

1st. 2nd. 3rd. 4th.

- (2) Circle on the 4 scales below, of 1 to 10, to what degree the programme helped you improve your English language skills and helped you with your 1st year studies.

Reading: -1 2 3 4 5 6 7 8 9 10+

Writing: -1 2 3 4 5 6 7 8 9 10+

Listening: -1 2 3 4 5 6 7 8 9 10+

Speaking: -1 2 3 4 5 6 7 8 9 10+

- (3) Before beginning the C.A.L.L. programme (Computer Assisted Language Language Learning), what did you feel about using a computer? Give a single adjective word answer and then circle the degree of your answer from -1 to +10, meaning from a negative reaction to a positive one.

Adjective: _____

-1 2 3 4 5 6 7 8 9 10+

- (4) After your orientation with Ms. Young and Mrs. Hirai, when you were first introduced to C. A.L.L., how did you remember feeling? Give a single adjective word answer and mark the scale.

Adjective: _____
-1 2 3 4 5 6 7 8 9 10+

- (5) After you started working weekly on the programme, did you find that it was helping your studies in Language? Please circle Yes or No.

YES NO
-1 2 3 4 5 6 7 8 9 10+

- (6) Did the programme help you with learning vocabulary? Please circle the number on the scale of 1 to 10.

-1 2 3 4 5 6 7 8 9 10+

Did it help you with learning new vocabulary?

-1 2 3 4 5 6 7 8 9 10+

Did it help you with reviewing vocabulary?

-1 2 3 4 5 6 7 8 9 10+

Did it help you remember the words for a long time?

-1 2 3 4 5 6 7 8 9 10+

Did it help you remember words for a short time?

-1 2 3 4 5 6 7 8 9 10+

Can you say how it helped you learn English words and what programmes were the most successful for you? Please write 1 - 2 sentences explaining what you think.

- (7) Has using the computer and this programme affected the way you learn vocabulary?

-1 2 3 4 5 6 7 8 9 10+

- (8) Did the programme help your understanding of the text and work in class?

-1 2 3 4 5 6 7 8 9 10+

- (9) Do you still remember a story from it well?

-1 2 3 4 5 6 7 8 9 10+

- (10) Was it fun?

-1 2 3 4 5 6 7 8 9 10+

- (11) Did you look forward to your C.A.L.L. work?

-1 2 3 4 5 6 7 8 9 10+

- (12) While working every week, what did you feel when you finished your worksheet? Give a single adjective answer and a 1 to 10 scale answer.

Adjective: _____
-1 2 3 4 5 6 7 8 9 10+

- (13) Has this had a long term effect on your English learning? How? Please explain in a sentence or two.

- (14) Have you changed your attitude towards studying English from taking this course? Please circle Yes or No and the degree on a scale of 1 -10.

YES or NO
-1 2 3 4 5 6 7 8 9 10+

- (15) Please describe your experience with the C.A. L.L. programme and suggest what you think should be added. What new skills did you learn? Also say how the programme could be improved.

Write 50 words or more.

B. The Focus of the Questions

While devising the questionnaire, my main intention was to garner information on reading, but as I wanted the students to think holistically about the project. Not wishing to bias them in only asking questions directly to do with reading, I framed the 2nd question on a scale of -one to ten+, asking them to compare the 4 skills from the question of; to what degree did the CALL programme improve and help their English language skills and 1st year studies? I was not interested in getting responses that the students thought were the ones I was looking for.

It is pertinent here that I add that, in the making of the questionnaire admittedly, there would surface a discrepancy between what I was asking and what the students understood by the questions. I tried to be as clear as possible, but the making of such a survey would take many more years of input by the students and research on my part to truly evoke responses that could stand the kind of research the field of SLA demands now of serious and viable papers. I trust that empathy on the part of the reader at this point, will not take away from what was achieved by the students, but place a certain amount of realistic responsibility on the writer who expected to have the opportunity to develop the programme further and could not. It is a fine art to produce a perfect questionnaire and takes repeated efforts and research to attain. I have made testing suggestions from this paper, which later given time, I would have applied. Still there is enough evidence to believe that the CALL programme, with a faulty questionnaire, still more than justified its existence.

Next, in the questionnaire, I wanted to get an idea of their attitude and reaction to CALL by asking them, again on a scale of -1 -10+, and by producing an adjective, what they felt before taking the course, how they reacted to the Orientation, and once working on the programme, did they feel it was beneficial to their other work.

The adjective response was mostly ignored, therefore will not be addressed in this paper.

In Question 6, I asked them about their vocabulary acquisition, generally, specifically on new and reviewed vocabulary, long and short term memory retention, how it helped them learn, and which part of the programme best facilitated that skill for them.

Question 7 asked the students if the CALL affected the WAY they learned vocabulary, positively or negatively.

Question 8 asked if the CALL programme helped in the comprehension of Language Major class work.

Question 9 was to see if, not just the first year students internalized and comprehended the texts from class, but also if the 2nd, 3rd, and 4th year students could remember any of the work done.

Questions 10, 11, and 12, were the crucial questions for me as they would indicate if the students enjoyed the CALL programme or not.

The final questions 13-15, were to give the students an opportunity to expound further on their experience with CALL and to suggest improvements.

VII. The Questions Focused On For Reading Analysis

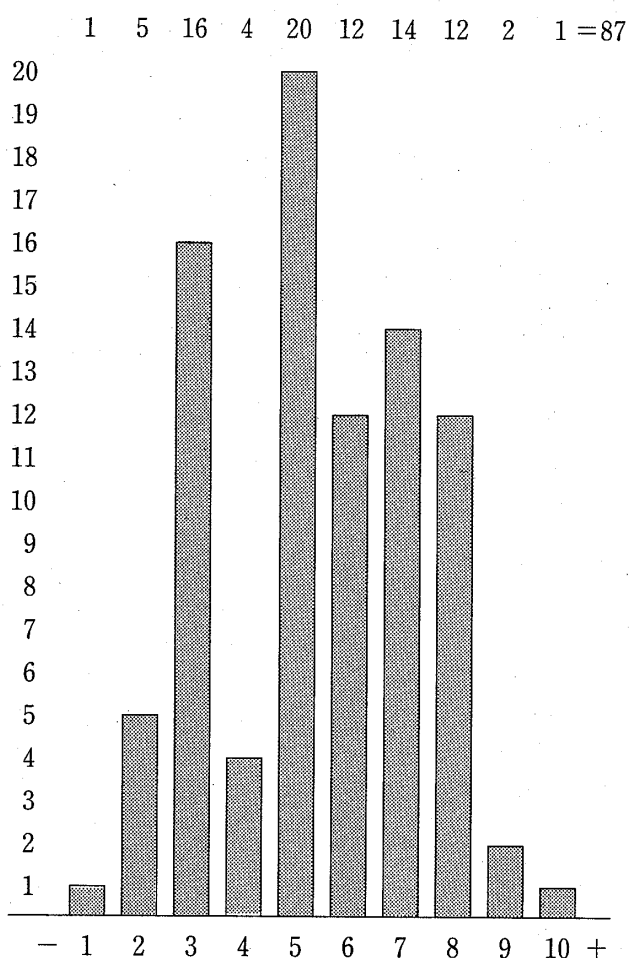
A. The Analysis of Question 2

Question: 2

(2) Circle on the 4 scales below, of 1 to 10, to what degree the programme helped you improve your English language skills and helped you with your 1st year studies.

For these figures I analysed the Reading scale data only.

Students:



From this chart one can make two observations. The first is that there appears from the 16 responses to the question, in the 3rd line on the negative side of the scale, from +1 to 4, that a fair number of students did not find the CALL programme helped them with their studies nor their English skills. I analyse this data as being very helpful in checking the validity and honesty in the students answering of the questionnaire.

Secondly, viewing the 31 students who answered on the positive side of the scale, from 6 to 10+, in comparison to the 26 on the negative, does show a marginally positive attitude to the CALL programme.

At this point I must explain my tallying procedures. I have discounted the answers on the score of 5, as I have decided that many students are

ambivalent and can use the 5 as a non-answer, neither answering one way or the other. A question for future work in evaluation would be the whether the use of a 9 point scale or a 4 point one, where students would have to indicate a definite preference towards positive or negative reactions would not be more viable. The 5 is almost the same as a non-vote.

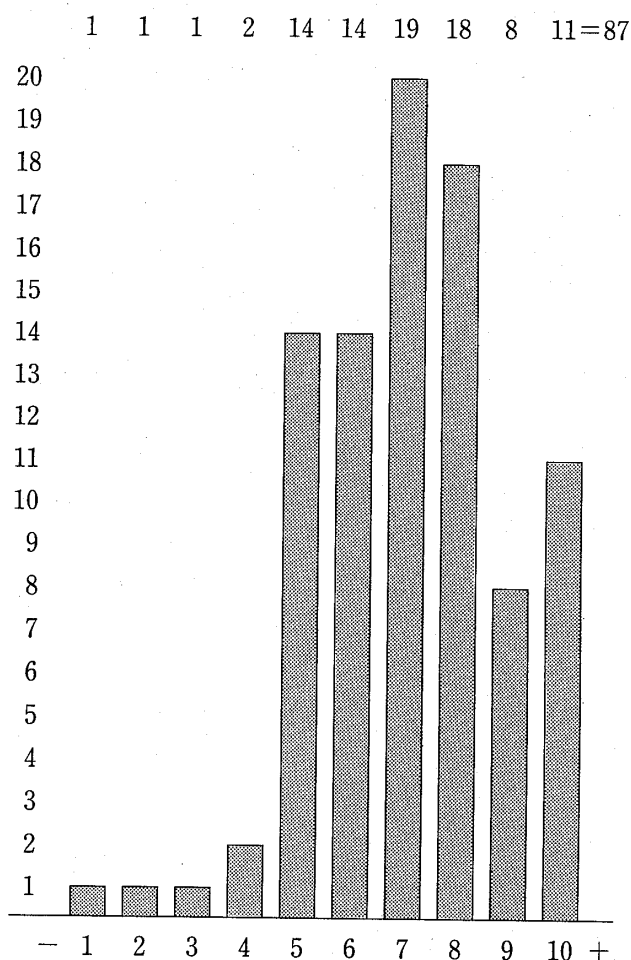
The response from the 143 Language Majors was disappointing. Still more than half submitted the Questionnaire by the due date. From the 1st. year students, I received 87 completed forms. 56 did not complete the questionnaire.

B. The Analysis of Question 6

Question: 6

(6) Did the programme help you with learning new vocabulary?

Students:



Although the response to the direct question of their improvement in reading was not very assuring, when asked specifically about their new vocabulary acquisition, the response, I would say was more positive. One can say from this chart that there was a strong indication that the CALL programme did promote a positive leaning experience by helping the students learn new vocabulary. From this one can therefore assume that their ability in reading was enhanced by CALL.

C. A Recording of Students Written Responses to Question 6

Question 6:

Can you say how it helped you learn English words and what programmes were the most successful for you? Please write 1-2 sentences explaining what you think.

Sample 1:

I could learn how to explain English words and how to use a computer. The grammatical programme was successful for me.

Sample 2:

The programme gave me the chance to learn English words regularly. The regularity was good for me. I think the programmes which dealt with problems of English grammar were the most successful.

Sample 3:

Every time we used ten words, but sometimes I couldn't understand the English sentences in the Longman's dictionary.

Sample 4:

Code breaker was the most successful for me. I learned words by heart at that time.

Sample 5:

Wordstore is very useful for reviewing vocabulary. Letter hunt is exciting and interesting.

Sample 6:

I looked the words up in my dictionary and put them in the computer, so the programmes were helpful and I remembered the words.

Sample 7:

It is useful to look up a word in the dictionary by myself.

Sample 8:

It helped me increase my vocabulary. Letter hunt was very interesting and it helped me look for words more quickly.

Sample 9:

'Test Yourself' is the most successful for me. It helped me to remember new words for a long time.

Sample 10:

I think using cards is the most successful.

Sample 11:

I learned real meanings of words. I realized how to use those words.

Sample 12:

I think that 'Story board' is the most successful for me because the programme helped me to learn new vocabulary.

Sample 13:

I think it helped me to remember words and the test of vocabulary was the most successful.

Sample 14:

Code breaker is the most successful for me. It helped me with taking new words into my vocabulary.

Sample 15:

I reviewed the words every week, so it helped me remember the words very well, but it took a long time day by day.

Sample 16:

It helped me because I did it once a week and continued that. The test was the most successful for me.

Sample 17:

It helped me to learn new English words and how to use them. Wordstore was the most successful for me.

Sample 18:

I think 'Test Yourself' is the most successful for me, and Test Mode (about 20 questions) was good too.

Sample 19:

Wordstore was the most successful for me because I tend to learn new words by heart only before the examination. I couldn't learn all of the new words, but I could learn some words speedily and easily.

Sample 20:

To make a sentence with a new word by myself helped me learn how to use the new word. The Choice master program was the most successful one for me.

Sample 21:

'Story board' is the most successful for me because it is useful for the examination.

Sample 22:

The programme helped me learn the exact meaning of vocabulary. I think Wordstore is the best programme because I learned a lot of vocabulary and how to use them in sentences.

These samples were taken from the bottom of the questionnaires I received. One can observe that the majority of students wrote that the CALL programme did help them increase their vocabulary intake and usage. Different programmes appealed to different students and through this sampling all of the programmes were mentioned, with 'Wordstore' being the most significant one in number.

Sample 10 referred to the use of vocabulary as being the best way for her to acquire new vocabulary. Not all students find the CALL programme meets their needs and having used the 'card' method for much of her studies in English, this student probably likes the more traditional methods of learning, as it is a more comfortable, and a long practiced approach for her.

Three students referred to the use of the Longman's Active Study dictionary. At the beginning of the new school year, students were told to buy this dictionary for class work and for the CALL programme. It was necessary for them to have, when doing 'Wordstore' work. It was one of our

goals to ensure that students gained the ability to utilise an English/English dictionary and become comfortable by using it regularly. It was necessary to wean them from using Japanese/English dictionaries where the constant translation between the two languages didn't encourage students to read English for English comprehension. Working completely in the English language had them focus just within the second language, which at the beginning was more difficult, but soon the students were naturally using this new skill.

D. The Analysis of Question 14

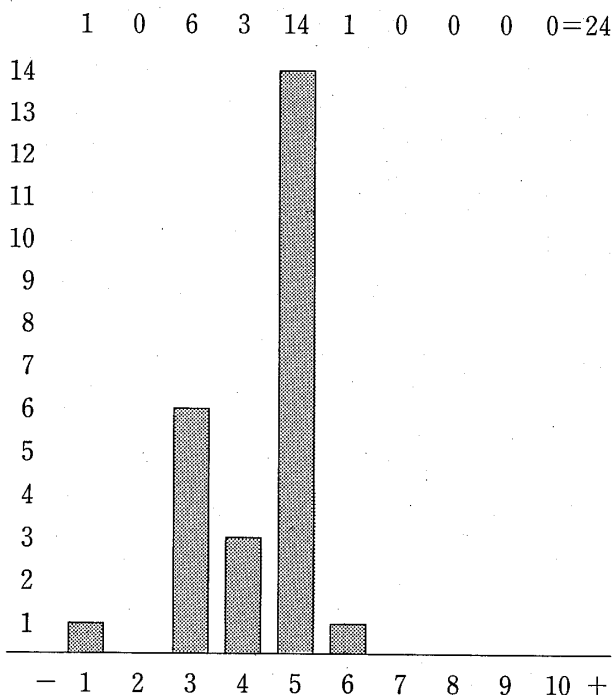
Question: 14

- (14) Have you changed your attitude towards studying English from taking this course? Please circle YES or NO and the degree on a scale of 1-10.

NO	YES	
24	63	=87 students

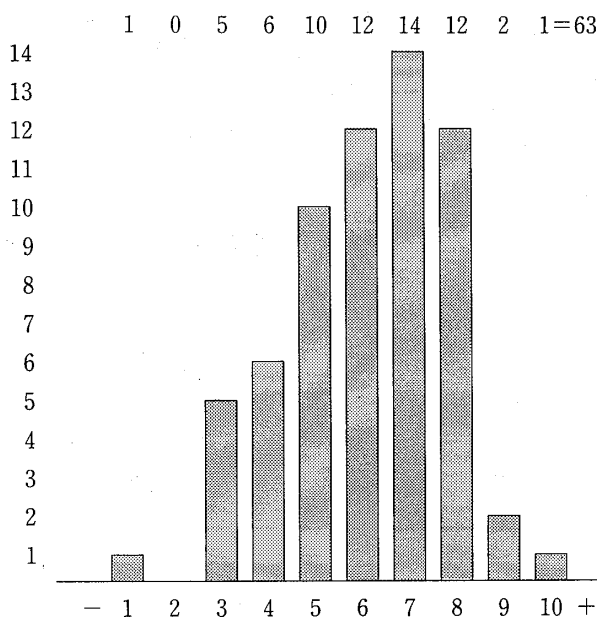
* The NO ratings on a scale of -1-10+ : *

Students:



* The YES ratings on a scale of - 1 -10 + *

Students:



The NO ratings were grouped at the questionable 5 on the scale. As earlier mentioned, this represents what I define as a no-answer. Still these 24 students did not change their attitude towards studying English by taking the CALL programme. At most one could say that they were ambivalent towards CALL.

The YES ratings were clumped around the 7 on the scale and mark a fair response to the CALL programme, indicating that the programme did have a positive affect on their attitudes towards studying English.

VIII. Findings and Discussion of the Three Questions

A. Question 2

Studying the graph of the student's responses to how much CALL helped improve their reading skills, I was at first perturbed by the number of students that felt the course didn't aid them very much. I thought about this and came to my own conclusion that they are not very aware of the kinds of reading that they are involved with daily. I asked a student what she considered 'reading' to be and she answered simply "text books".

After hearing this, I realised that I needed to ask in the questionnaire, 'List the things you read' or 'Make a list of the things you like to read and a list of the things you don't like to read' or 'Think of all the different things you read every day and for what purpose' The student's response above, indicated that she had little concept of all the reading she did in English or Japanese, and that READING to her had a negative connotation. She applied her understanding of reading only to a forced, unpleasant, and limited area. As most of the students have experienced the 'translation' method, her frustration in reading English, without the detailed word for word 'Yakudoku' method, would definitely have a negative effect on how she perceived the reading of English. I think it would be of benefit to my students for me to take some time and help them become aware of what reading actually entails. It would certainly boost their egos if they knew how much they actually do read in English and pride themselves on the fact that they couldn't function as well as they do in the class and in CALL, if they didn't have such competent skills in reading.

As Dr. Munro and many of the Professors at Columbia have so often said, statistics can be manipulated to say what ever you want them to say, and from this, I decided to consider the chart in another light. I added up all the figures that fell below the figure 5 on the chart and all the figures above the 5, to compare the less positive numbers with the more positive ones. 26 students were less and 41 were more, so it indicated to me that the students were fairly confident in thinking the CALL programme helped their READING skills.

An unclear definition of reading by the students makes any interpretation of these questions very difficult. Still looking at the graph, there seems to be a healthy clumping of responses beyond the figure 5, but I can not deny that the 26 negative responses have indicated some weakness in the programme in the respect to READING in the student's eyes. At least they were being honest!

B. Question 6

The graph dealing with the student's responses to whether the CALL programme helped them acquire 'new vocabulary' showed strong positive feedback. 70 out of 87 students circled the scale above the figure 5. Whereas 5 out of the 87 students circled the scale below the 5.

All the programmes in the CALL project entailed 'Reading for a Purpose' and 'Reading for Comprehensions'. 'The Wordstore' programme also included the regular use of Longman's 'Active Study Dictionary of English' and this, I think has had the greatest effect on the student's ability to understand and acquire new words.

This more specific question in respect to the CALLs benefits towards the student's reading progress, indicated that the computer did serve a positive role in English Language education.

C. Question 14

How much CALL changed the student's attitude towards studying English, was asked to test what the overall reaction to the CALL programme was. Out of 87 students, 24 said it didn't help them see English in a positive light and 63 students said it did.

This must indicate the usefulness and viability of the CALL work.

Overlapping the YES and NO graphs seems to indicate a strong positive reaction to CALL and I take that to indicate that the students on the whole enjoyed the experience and came away from it with a feeling of growth in their English abilities and an acquisition of better reading skills.

By overlaying the charts from the three questions, I found that a significant number of responses were rated on the positive side of the scale and therefore, it would be reasonable to assume that the CALL programme generally effected the reading skills and English Language skills positively.

IX. CONCLUSION

This 'Descriptive' research paper has attempted to determine the students overall observations, reflections, and positions towards the CALL programme with a focus on vocabulary acquisition and reading skills. Gardner proposed that in evolving theory and research in CALL, attitudes "social psychological phenomena," play a vital part in the study of a second language (Chapelle and Jamieson, 1991). The programme although not developed as far as it could be, due to numerous limitations, did attempt and to a degree, fulfill the original goals and objectives that were its concepts.

At this point in discussing the results of, and implications of, the CALL programme, I will refer back to the list of the CALL project objectives and from the position of realising or not realising those within the context of reading, define whether the students reactions to the programme fell within positive or negative feedback positions.

Patricia Dunkel (1991) used Penderson's summarization of her reading-comprehension study in an narrative review of the CALL research base (1987, pp.125-126) and condensed the trends in CALL publications. It is through these in combination with my CALL objectives, that I will come to my conclusion.

"*Meaningful (as apposed to manipulative) CALL practice is both possible' (Schaeffer. 1979, 1981) and preferable (Penderson, 1986).

*The design of the CALL program can encourage the development of language learning skills and result in more learning (Johansen & Tennyson, 1983; Robinson, 1989).

*Learner differences in CALL use can be traced and identified easily and accurately by keeping track of their interactive learning strategies (Jamieson, 1986; Penderson, 1986). Learner differences can affect "Learner strategies. Learn-

ing gains, and attitude in CALL" (Chapelle & Jamieson, 1986; Penderson, 1986)."

Taking the first objective in my CALL programme, which was: —to compliment the 1st Year Language Major Freshman course, there was meaningful correlation between the material taught in the classroom, as the texts and vocabulary input by me on to the formatted disks, was taken directly from and re-reflected the curriculum being taught at the same synchronised time in the CALL programme. I must add here, that it took weeks of work just to premeditate when the new material would need to be presented in the worksheets, with respect to the curriculum and the academic calender. The programme was designed to encourage the further development of language skills learned in the class and backed up by the items stressed therein, with addition usage in the CALL Programme.

The second objective was : —to increase vocabulary skills and acquisition. Through the weekly use of the 'living dictionary' Wordstore, students were involved in interactive usage of vocabulary items needed and utilised in the classroom. With the Longman's English/English dictionary, the students were recycling vocabulary at a slow but compounding rate per week. The testing mode which was part of each weeks worksheet demanded that the students were constantly reviewing this vocabulary and marking their scores. This self testing was done every week and handed into me to be checked.

The third objective was : —to improve English reading skills. Each and every programme they accessed needed the three types of skills in reading as necessary to complete the tasks involved. Incidental reading, the reading of instructions, was necessary in order to successfully complete each weeks activities. Reading comprehension and Text manipulation was a constant in the weekly work allocation. This is a fulfillment of the second of Penderson's references to, Johansen's and Tennyson's and Robinson's theories, that the

design of the CALL programme can encourage the development of language learning skills and result in more learning.

Not discussed in this paper was the cumulative effects of CALL on the improvement of writing skills. Let it suffice that, with all the implementation of new vocabulary and through the increased dictionary skills used in writing sentences for Wordstore, students writing ought to have gained some benefits from the meaningful manipulation of words, sentences, and texts.

Students self-tested all of their work each week, as each part of the programme had the ability to evaluate students and give score ratings. Also each worksheet was designed with instructions to document self-testing results and areas where to score them. One of the many criticisms of CALL has been the lack of testing and the lack of complex students/teachers record keeping procedures. I designed the worksheet with this in mind and kept it simple but direct, so that the students and I could quickly see how they were doing and also gain rewards and confidence in improving scores. This objective was accomplished.

The work each week was not supervised and it was up to the students to come when they had time free to do that weeks work. Here I would like to say that the students were consistent, diligent, and very responsible in attending and completing the tasks given them. They were autonomous and felt a sense of pride in their steady self-instruction. I never had to 'police' them, but would go there just to see how the students were getting along. It was always a pleasure to enter the room and find the students working with concentration at the terminals. Even though some of the work got progressively difficult and at times was perhaps boring, the learners determindly finished the tasks. The reading of instructions and information displayed on the screen was at times difficult, but with constant weekly reading practice and meaningful manipulation of materials presented, the students became

competent in their second language reading.

Through the year the learners learned word processing skills and computer skills. For the first two years I was able to have a teacher teach typing skills for the first 6 months of the programme, but unfortunately those stopped. The Letter Hunt programme, as a supplement, was threaded through out the course as a means by which the students could acquire and practice keyboard skills while playing the game.

I can at least be content that by fulfilling the objectives set out, the students were acquiring the skills to enable them to progress further and become involved with more dynamic usages of the computer. This is definitely where the CALL programme was leading to. Unfortunately due to many logistic reasons the next steps were not viable.

Frank Smith, in his book 'Reading Without Nonsense' (1985) Chapter 9, presented the same arguments with which I opened this paper. I include mention of it now, to again remind others, who wish to develop a CALL programme, that one will come up against 'computer' prejudice and no matter how carefully a CALL programme is designed, it will always be found lacking either in viability, content, procedure, or focus. Nevertheless, it is by teachers who are concerned with giving students as much opportunity to improve their skills outside vital classroom teaching, who are willing to devote themselves to improving and correcting the damage done to CALL's reputation, that better utilization of computer assisted language will come about. At the end of Frank Smith's summary, he does leave us with a positive note.

But computers can be used by children as tools to assist them in their effort to exploit the possibilities of written language. Electronic technology cannot be ignored in the classroom and teachers must not leave decisions about how computers should be employed to outsiders."

By using the careful, negativity that Dr. Smith cautions teachers of CALL with, and by viewing it in an alternative perspective, one can contend that teachers are encouraged to develop CALL further. And in turn, it is by teachers who continually experiment and strive to develop CALL, students will reap benefits in SLA.

In closing, I would like to quote Dr. Fanselow's reference to the fear teachers have of 'striking out' from the accepted "suggestions, insights, and information" of "experts" and supplementing "self-generated alternative" ones. (Breaking Rules, p.7) ;

But confidence comes as we remember the Socratic idea of teaching: aiding each other to remember what we each already know, helping us see what is within each of us.

Having four years of experience with CALL, taking the opportunity to recognise the value of CALL within the simple framework presented in this paper, I can now attest to CALL being a valid Medium/tool in the field of SLA. The students continued to enlarge their reading skills and most importantly were given the opportunity to exercise them within a media, the computer, which on the whole they enjoyed using. I have taken this opportunity to investigate and relate my findings. There are "..... miles to go before I sleep." as Robert Frost wrote, but here was a new learning 'beginning' for my students and for myself.

With all the research accomplished and with all the work being presently pursued around the world, CALL will outgrow its fraught past and continue to aid students in their quest for Second Language Acquisition.

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