ICT and Applied Linguistics – A Project Approach

Associate Professor Dr. Kim Hughes Wilhelm

Department of English Faculty of Social Sciences and Humanities University of Macau CHINA

kimhw@umac.mo

ICT AND APPLIED LINGUISTICS - A PROJECT APPROACH

ABSTRACT

This workshop discusses and shows examples of student-created ICT projects developed as part of Applied Linguistics coursework. A "Top 20 Site Search" asked students to select sites to recommend to other (novice) teachers of English. Besides student learning resources, they also located resources of use to teachers for lesson planning, test development, and so on. A similar project was conducted with students in a graduate Materials Design course. Students submitted their top sites, which were compiled and made available on web CT. In class, they took turns showing the best features of their favorite sites. Perhaps the best example of learner motivation linked to IT comes from undergraduate courses in first and second language acquisition. Although not explicitly asked to use IT, the better projects integrated digital video clips so as to show samples collected during their research. Another example is a fieldwork "scrapbook" presented via Power Point. It is clear that students went well beyond the requirements of the assignment when implementing and presenting their projects. IT was obviously a valuable tool and even a motivator for students as they explored language learning issues, processes and concepts.

INTRODUCTION

It seems clear that, even though instructional technology will never replace human teachers in language classrooms, teachers who teach with technology may be considered more valuable and effective than those who do not. ICT applications in classrooms are fast-growing and rapidly-changing resources which can bring multi-media into the classroom and connect students and teachers to the world outside the classroom. Although teachers can take the lead and be good role models by using ICT as an integral part of instruction, it will be students themselves who supersede our knowledge and skills with multi-media and technology. One way this becomes obvious is in class presentations and project work in which students draw upon ICT and act as role models for other students who may be less familiar or comfortable with technology.

The focus of this paper is on describing ICT-related projects implemented as part of Applied Linguistics coursework. I have worked with students in computer classrooms where the focus is on using language learning software or on using computers for a variety of language learning tasks. However, the focus of this paper is on integrating content-based instruction (in this case, Applied Linguistics) and technology while encouraging interaction and sharing between students. As such, students quickly realize that the teacher is only one of many resources available for learning. It is practical and motivating to learn from and with other students as they explore and present with the aid of technology.

Three projects will be presented and examples given. The first is a "Top 20 Site Search" in which students browse and select internet sites to recommend to other students. Another example is of a fieldwork "scrapbook" kept and presented via Power Point. The final project was longer-term and more complicated, involving language analyses and topics related to

first language acquisition and second language learning. I found that, although not required to, students relied heavily on computer technology when collecting data, presenting and discussing their projects and showing language samples. Multi-media can bring the outside world into the classroom and enrich not only teaching and learning outcomes, but also positive classroom interactions and enhanced individual motivation.

"Top 20" Site Search

In this project, undergraduate students majoring in English Studies or English Education were asked to conduct internet searches to identify sites of value when learning English as a second or foreign language. They were also asked to locate sites of interest to themselves as individuals (art, music, travel, and so on) but also in English. Their final goal was to develop a "Top 20" list by giving the site address, a brief description, the focus group (teachers, primary grades 1-3, secondary, etc.) and skill or topic areas (vocabulary development, lesson planning, travel, etc.). The class then met in an internet-connected classroom for two class periods and we had a "show and tell" session, visiting the sites and learning about their features.

This was an excellent way to share and explore internet-based resources. At the same time, learners were actively involved in explaining, summarizing, and even "selling" their sites to classmates. For these students, for whom English is a second language, I was pleased to learn that several bookmarked sites for their own use and their siblings' use as English language learners. This project was implemented early in the semester and was useful as a class-building activity and as a way for the teacher to quickly identify class leaders and more (and less) competent users of English.

One word of caution is that it is best to limit the number of sites to 15 or 20 maximum. It is important that students are involved in critically evaluating and being able to show the various features of particular sites. In a revised version of this project which I conducted with in-service teachers enrolled in a Materials Design course, I limited them to a "Top 10" list and asked that they focus on two sites to share with us in class. This worked quite well as it was a smaller group and we were able to follow each speaker as he or she went into detail while showing us the features of selected sites. A compilation from the graduate Materials Design course is provided as Appendix A.

In the larger undergraduate class, half the class was asked to "show and tell" the other half, with students moving freely from computer to computer throughout the class hour as they tried to learn about as many sites as possible. As a follow-up, it is important for the instructor to provide access to a comprehensive list of all the sites explored. This can most easily be done by uploading a master list to a shared electronic course such as can be accomplished via web ct. Another option is to save a comprehensive list of http:// addresses and send to students as an email attachment. That way, they can click on a link and be connected to the web site directly.

Electronic Fieldwork "Scrapbook"

As part of their second semester of work in the Applied Linguistics course, students are asked to visit language learning classrooms to observe and note principles of effective language learning and teaching. In the past, they have been required to be classroom "helpers" a minimum of ten hours across the semester, with me working with two local schools to place them into classrooms. They were asked to submit a record of what they were observing, which could take any form they wished. Occasionally, I asked them to focus on one or more topics (also covered in class) when organizing their thoughts. Topics included the following:

- ✓ meaningful, functional use of language
- ✓ authentic, high interest materials
- \checkmark motivation (intrinsic vs. extrinsic), rewards
- ✓ learner strategy training, learning style (multiple intelligences)
- ✓ learner affect & personality (language ego, self-confidence, risk-taking)
- \checkmark acculturation; the language-culture connection; building a classroom culture
- ✓ skill integration; teaching with content- and theme-based approaches
- ✓ L1 interference, interlanguage, errors and feedback; communication strategies
- ✓ learner differences; individualizing; working with learners who are at varied proficiency levels
- ✓ cooperative and task-based learning
- ✓ linking classroom learning to real life contexts; lifelong learning
- bilingualism, raising a child bilingually, bilingual schooling

Later in the semester, as part of a longer-term project, they would work with one of these topic areas, collecting samples from classroom learning contexts and presenting as a "mini-research" project. For the fieldwork record, however, they were to consider all the topics and how they saw them being implemented and incorporated in educational settings.

Most students simply gave their results in a journal, listing the class observed, what was happening that day, and their reactions. Others included pictures and captions, making their record look more like a photo album. One student asked to submit hers in the form of a Power Point presentation, which I will show some sections of shortly. This was nice because she was able to arrange and rearrange her findings, adding to the file as she made more visits. She could arrange by topic and include photos, which made it more interesting. Electronic submission provided a product that I could easily upload to the web course and now show as an example to other students. A sample page of her scrapbook is provided as Appendix B. That project will be conducted differently this year, with each of my students paired with and "shadowing" a student for one entire day at one of the two schools. We are asking permission for them to take photographs and video clips during their school experience and I intend, this year, to ask that they all prepare an electronic "scrapbook" of their student shadowing experiences, along with their reactions, in the form of a Power Point file. The best of these can be uploaded to our webcourse for sharing and learning purposes.

Applied Linguistics "Mini" Research Projects

Through my work with second year undergraduate students majoring in English Education or English at the University of Macau, I have been impressed with how technology can be employed by students when teaching or presenting to other students. The English Education majors have been especially creative with slide show and multimedia integration, partly because they were enrolled in an instructional technology course while taking my course. They worked hard to master and use technology in their presentation of "mini-research projects." When I first began working with projects in applied linguistics with undergraduates in 2002, I limited it to a single project conducted in the second semester of the course. Using the *Projects in Linguistics: A practical guide to researching language* by Wray, Trott, Bloomer, Reay and Butler (2001), I provided students with a list of project ideas which I thought were feasible and which linked to content covered throughout the course. At the same time they received the project list, I asked them to decide groups of no more than 4 students. They were also given the option of working alone. Groups were given a few weeks to go through the text, deciding project ideas they found most interesting. This in itself was a useful activity as it helped them to realize the breadth of the field and helped them to realize what was meant by "applied" linguistics.

As soon as possible, they sent (up to three) top choices to me via email, along with ideas of how they might be able to collect data (e.g. from family members, language classes, friends) or whether they needed my help to arrange data collection. About half found their own participants and the other half asked my help to arrange data collection on campus or in local schools. Most were able to work on their first choice of project and all had a project within their top three picks. I wanted to have as much diversity in the projects as possible so that we could consider and learn more about each sub-field of linguistics. Topic areas included psycholinguistics, first language acquisition, second language acquisition, multilingualism, semantics, pragmatics, discourse and text analysis, language history, sociolinguistics, gender and language, syntax, and phonetics/phonology.

I have changed the project assignment over the last few years, finding that it worked better to focus on first language acquisition first semester and second language acquisition second semester, with projects conducted both semesters. This cut down on the students' stress level and provided more cohesion to the course. We are still able to explore the sub-fields of linguistics listed previously, but within the context of language acquisition. Students are able to draw upon what they achieved first semester and are much more confident when collecting, analyzing, and presenting their second semester project. For example, one student commented at the end of the first semester, "Linguistics is interesting, and working with small children is fun... [the project] helps a lot with this 'first language acquisition' thinking because it is more practical when you talk to the children instead of just reading the book. For sure I will continue to take this course." Having completed a project first semester, they are much more assured when working on a project second semester. I also find that they independently develop their technical skills as they improve their Power Point presentations and learn how to incorporate digital photo, video, and audio clips. Those who did not choose to use much technology first semester are much more likely to incorporate it the next semester, having seen what others did and deciding it worth the effort.

There is still some variation in how the projects are implemented. Variation depends on the number of students in the class, whether or not the students themselves have access to self-chosen subjects, and whether or not fieldwork experiences can be arranged. For example, most recently I had a fairly large class of over 40 students and was unable to provide fieldwork experiences for all of them. In addition, we could only allocate two weeks for presentations in class. Subsequently, they worked in larger groups than normal and I provided most of the groups with raw data in the form of video clips.

Typically, with class sizes of 20-25, they work in pairs or triads since groups of over four students tend to have at least one student uninvolved in the project. The students are asked to

begin work on their projects no later than midterm, meeting with me at least once in tutorials to get them started. I have found it necessary to schedule an initial tutorial with all of them so as to find out plans, progress, and individual responsibilities. This helps me to find out how I can help them, whether it be making a video camera available, helping them to find subjects, or helping them to simply feel comfortable asking for my help. Most groups meet with me three or four times as they proceed through the project. Although no grades are given until the final presentation, I offer to review and edit their handout and slide show display if given to me before the in-class presentation. Class presentations are 20-30 minutes in duration and scored by both their classmates and by me, the instructor. Each member of the group must present equally. They are also asked to anonymously "pay" each member of their group. That evaluation is converted to a score for each group member, with the final project grade being the average of the grade given by me, by their classmates, and by their group members.

Although a complex assignment, the students are motivated, interested, and come up with high quality products. They get a real taste of what linguistic analysis involves, as can be seen in the comment that follows:

"I also learnt how to collect data and sort out useful data from the less useful ones. When we video taped the children, we have tried so many times to make them read and retell without playing around. In analyzing data, gosh! That was really a nightmare. We have stayed in front of the computer, reading the lips of the children to see if they have pronounced the /d/ sound correctly. (I have watched each clip at least 50 times)"

A number of students commented on the benefits of linkages made between the classroom and real life learning. For example, one said:

"I gain a lot in how to collect data, analyzing them, how to interact with children and presentation. The course is so "alive", not just sitting in the classroom and learning through books."

Many students comment that the course is a lot of work and they feel a great deal of time and effort must be given to it. This worried me the first few semesters as I was afraid there would be a consequent drop in enrollment. However, the students seem to feel the work is worth it, as can be seen from sample comments given below.

One student said:

"Analyzing the speech of our interviewee is not easy, because we have to play the clip many times so as to pick out the best part to present and break down into small detail so as to make our classmate understand what we want to express. Although the process is complicated, it has been a fruitful one because with this experience, we could probably become more efficient and professional in other presentations to come. Also, it is also very valuable to learn from others groups. Last but not least, I am very grateful because I really learnt a lot in books and have obtained life experiences from this course."

Another student wrote:

"Although we have a lot of homework to hand in throughout the semester, it has been a great chance for us to practice and learn. I think the things that we have learnt are very practical. The thing that I enjoyed most and probably would help me much in the future is the presentation. This is the first presentation in my life that requires video taking and analysis of our interviewee. I satisfied very much with our presentation. It is a most valuable chance to be able to work with a 2 year old boy. From our interaction we practiced the things that we have learnt in the book."

Some students even shared their work with their parents and several commented on how the project has made them more aware of language development and language use of people around them. One student remarked that:

"After this course, I am used to paying attention to children speech; I like to find out their mistakes and their patterns. It is quite interesting. I gave the video that I made to my parents to watch them. They also said that I was also like that when I was a child."

As can be seen in the project presentations which I will share with you now, the students clearly followed the steps for scientific enquiry and were able to explain their project focus, purpose, hypotheses, methodology and results. Sophistication with technology allowed them to do justice to their work, incorporating video clips and making their projects come alive to the audience. Sample slides are included as Appendix C. (view sample presentations with video clips)

Through their presentations, we as a class were given a clear insight into what it was like to work with the subjects as well as their methodological procedures. These projects allowed us to truly bring the outside world into our classroom while exploring and experiencing applied linguistics. At the same time, a number of issues arose during implementation of these particular IT-related projects. Some are procedural while others are concerned with learning and teaching. Due to space limitations in this paper, I have simply summarized them in point form as Appendix D.

CONCLUSION

My purpose in writing this paper is to share some of my experiences with projects incorporating instructional technology and content-based instruction – in this case, Applied Linguistics. There are a number of ways in which students can be motivated to explore ideas and to share their experiences with the use of technology, both inside and outside the classroom. Student can hone their presentation and technical skills when presenting fieldwork projects. This in turn motivates others to explore and learn about technology in order to better show *and* tell about their projects. Showing *and* telling provides insight to all involved in regard to the learning processes and challenges involved when doing a complicated project. Presenters were able to do justice to their work while exposing and introducing us to the world outside the classroom.

Appendix A – Top 20 Websites

compiled from Materials Design graduate course

http://lang.swarthmore.edu/makers/

Interactive exercise makers help teachers make your own online exercises. Good for ESL courses at any level.

http://www.aitech.ac.jp/~iteslj/

Internet TESL Journal: Teaching techniques, journal articles, student and teacher links, lesson plans, games, tutorials.

http://www.eslcafe.com/

Dave's ESL Café: Contacts and resource links

http://www.literacynet.org/cnnsf/

A series of web-based modules designed to teach reading skills. News stories and vocabulary

exercises. Choose a story, read the original news story, a simplified version, or an outline.

http://ti2.sri.com

Tapped In is a web site developed for educational exchange and literacy development with a focus on collaborative exchanges.

http://www.geocities.com/vance_stevens//esl_home.htm

A web resource for CALL lab managers. Excellent resource for those getting started in CALL.

http://www.eviews.net/

Downloads of native English speakers in 10-11 minute interviews. Provides glossary of vocabulary, comprehension questions and answers. Teacher link provides lesson plan. Free student lesson once a month. Subscription of \$10.60 required for teacher access.

http://www.nonstopenglish.com/

Grammar and vocabulary exercises.

http://www.eslflow.com/

This site includes role plays, debates, and activities exploring multiple intelligences.

http://iteslj.org/Lessons/

Lessons and lesson plans from the TESL Internet Journal.

http://towerofEnglish.com

Tower of English. Over 300 links in 34 categories for ESL students and teachers.

http://www.focusenglish.com/

Focus on English. Topic-sorted conversation prompts with audio downloads of possible responses.

http://a4esl.org/

Internet TESL JournalLinks for ESL/EFL students with quizzes, crossword puzzles, and other

activities

www.esl-lab.com

Randall's ESL Cyber Listening Lab

Easy, Medium and Difficult listening tasks on a variety of subjects. Exercises include pre-, during, and post-listening questions.

http://www.siu.edu/~cesl/students/students.htm

Student Corner portion of the Southern Illinois University Center for English as a Second Language

Homepage. Links to selected sites for learning English on the Web and other resources.

http://www.nga.gov/

National Gallery of Art home page. Includes a kids page with interactive activities, a tour of the collection, and an artist of the week feature

http://www.storyarts.org/

Story Arts on line. Resources for classroom storytelling. Lesson plans, stories, and more.

http://www.storynet.org/

National Storytelling Network.

http://tolerance.org/

A site to help learn and teach tolerance. Includes stories, activities, and games for children on

"planet tolerance;" activities, posers and materials for teens to encourage diversity; and a wealth of resources for teachers.

http://literacy.kent.edu/Oasis/Resc/Trade/

Recommended trade books for adult literacy programs, annotated bibliography.

http://teacher.shop.pbs.org/

A wonderful resource for ordering videos (some even have transcripts).

www.cal.org/ncle/Majpubs.htm

National Center for ESL Literacy Education

Listing of adult ESL resources with emphasis on Spanish-speaking learners

http://www.englishbaby.com/

English Baby.

http://www.pacificnet.net/~sperling/quiz/ ESL Quiz center

A growing collection includes interactive quizzes in current news, geography, grammar, history,

idioms, slang, and other things.

http://www.tesol.org/pubs/magz/tq.html

TESOL Quarterly.

http://www.eslpartyland.com Karen's ESL Partyland

This excellent site has a lot of activities for students (i.e. grammar exercises, ESL chat rooms, etc.)

and many ideas for lesson plans (i.e. language games, activities, etc.)

http://lc.byuh.edu/CNN-N/CNN-N.html

There are listening guides to go along with CNN Newsroom broadcasts that can be copied and

given to students. Copyright permission is granted for the use of the broadcasts and the guides to

any teachers who register at this website.

http://www.wordsmyth.net/ Wordsmyth: The Educational Dictionary – Thesaurus

This site allows students to look up a word, and it gives the definition, pronunciation key, and related words.

http://owl.english.purdue.edu/handouts/index2.html Purdue University Online Writing Lab (OWL)

This site is a good directory of online resources for ESL students. It has

links to sites that look at grammar, offer free online ESL tutoring, classes, dictionaries, etc.

http://www.learner.org/exhibits/ Annenberg/CPB Exhibits

Provides a collection of quality interactive exhibits on topics such as the weather, amusement park

physics, the renaissance, making of Hollywood films, and math.

http://www.actden.com The digital education network (DEN)

This website offers up-to-date information and interactive features that encourage students to learn,

think, and participate in the online community.

http://www.ceismc.gatech.edu/busyt Busy teachers' web site

Teachers will find resource materials, lesson plans, and classroom activities.

http://www.nytimes.com/learning/teachers/index.html New York Times Teacher connections,

Grades 6-12. Teachers can access a lesson plan on the day's news and print it out for classroom use if they choose.

http://www.thegateway.org Gateway to Educational Materials (GEM)

GEM provides one-stop access to high-quality lesson plans, curriculum units, and other resources.

http://www.eflweb.com EFLWEB

This is a clearinghouse for information about teaching and learning English as a foreign language.

http://www.pacificnet.net/~johnr/aesop/ Aesop's Fables

This site is for listening and reading. In addition to, it enhances the students' critical thinking.

http://www.wordsmith.org/awad/index.html_A word a day

E-mail subscribers receive a daily message containing a word and its definition.

http://www.edunet.com/english/grammar On-line English Grammar

This is an excellent and concise British English Grammar resource

http://www.iecc.org Intercultural E-mail Classroom connections

This helps teachers and classes link with partners in other countries and cultures for e-mail

classroom pen-pal and project exchanges.

http://crayon.net Crayon: Create your own newspaper

This helps students create newspapers using pre-selected Internet sites.

http://www.contemplator.com

This provides lyrics and MIDI files for folk music of English and American. A music educator

shares lessons and techniques

Appendix B – Electronic Fieldwork "Scrapbook"

(sample page from Power Point presentation)



- It was a picture when I dressed up like a clown. The children seem interested



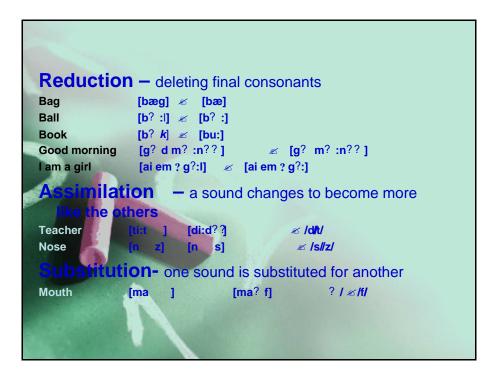
- I left my picture in the classroom and it was stuck on the board for another three weeks!

Appendix C – Sample Slides from "Mini-Research" Project Presentations

• • •	Introduction	
old girl. She	t, our group has chosen Isabella to investigate. S In this⊚riejectΩourogrobp l can speak both English and Polish; her dominant la old girlgShœcamgpagk will investigate her English speaking patterns. English. We will investigate	both English and Polish; her dominant la
In this prese	ntation, our group are going to analyze Isabella in In thisspresentation;tourg	ஸ்ஷ் கூறலும் றg to analyze Isabella in
1. The 1. The	WhWh questions Isabella answers and raisesquestions Isabella answer	s and raises
2. How Isabe	ella responds in the form of 2. Howels a fees la "responds in the form of	
3. The non 3 .	The noncontingent responses Isabella givescontingent responses Isabe	lla gives
4. The incorr	rect forms of tenses4. The incorrect forms of tenses	

<u> The Wh – questions Isabella answers and raises</u>				
AnswerAnswer				
Example 1	Example 2			
Father: What did you eat when you woke up?	Father: How do we go to school?			
Isabella::bed-fas:	Isabella: (no			
Father: What are they eating?	response)			
Isabella: Bread and honey. Isabella: Bread	Bread and honey. Isabella: Bread and Father, Do we walk to school? Vho likes honey? Father: Who likes honey ?			
Isabella: Pooh Isabella: Pooh	Isabella: No. Isabella: No.			
She can respond correctly with the who-questions which begins with "why,", "what at " and "who,". However, she does not know how to answer the questions which be begin with "how." Wh – questions appear at the beginning of the language developing st st age. However, those questions which start with "how" are usually developed later. Isabella has not reached this stage yet.				

Video 2 analysis				
Words	Original speech	Kitty's speech		
Bag	[bæg]	[bæ]		
Ball	[b? :I]	[b? :I		
Book	[b? k]	[bu:] [b? k]		
Teacher	[ti:t]	[di:d??]		
Good morning	[g? d m? :n??]	[g? m? :n??]		
lam a boy	[aiem ? b??]	[aiem ?b? :]		
l am a girl	[aiem ? g?:l]	[aiem ?g?:]		
Doll	[d? :I]	[d? :I]		
Teddy bear	[tedi be?]	[tedi be?]		
Block	[bl?k]	[b? k]		
Ear	I I	[]		
Nose	[n z]	[n s]		
Eye	[a?]	[a?]		
Nose	[n z]	[n s]		
Mouth	[ma]	[ma? f]		



Appendix D – Issues when Implementing IT Projects

Learning- and Teaching-Related Issues

- □ Projects must be clearly tied to instructional goals & class content with which students are already familiar.
- Need to develop ongoing ties to appropriate community resources (in my case, schools, day care centers, tutorial programs, play groups). Take time for field trips to orient students to these contexts.
- Necessitates a shift in learner and teacher roles and responsibilities. Learners willing to be responsible for their own learning and teachers functioning as facilitators, expert reviewers, and "coaches."
- \Box Some students may give too much time to IT, at the expense of solid content.
- □ Content presented must be integrated into assessment schemes so that importance and value is recognized by the audience. (e.g. post project presentations on web ct and *include on the final exam*)
- \Box Samples from past students should be made available.
- \square "Show case" the best products within the university and wider community.

Procedural Issues

- $\hfill\square$ Each group needs at least one person comfortable with IT.
- \square Teacher must build in weeks for tutorials and project work (no all-class meetings).
- □ Proper equipment must be available in classroom when presenting (Ss may need to bring own computers).
- □ Must allow extra time in class for technical difficulties.