Mosaic

A Journal for Language Teachers

Published by éditions SOLEIL publishing inc.

In this issue...

Guest Editor: Hedy M. McGarrell

Vol. 7 No. 3 ISSN 1195-7131 Spring 2000

Visit us on the web at **www.soleilpublishing.com**

Founded in 1993 by Anthony Mollica, **Mosaic** is a journal published four times a year (Fall, Winter Spring, Summer) by éditions Soleil publishing inc. Manuscripts and editorial communications should be sent to: Professor Anthony Mollica, Editor, **Mosaic**, P.O. Box 847, Welland, Ontario L3B 5Y5. Tel/Fax: [905] 788-2674.

All articles are refereed anonymously by a panel of readers. Authors are required to be subscribers to the journal.

The language graduate who never reads a professional journal and participates only minimally, if at all, in professional meetings, will stagnate. There is an onus on the profession in all areas to upgrade and keep abreast of current developments in the field. **– Peter Heffernan**

Mail Canadian subscriptions to:
Mosaic
P.O. Box 847
Welland, Ontario L3B 5Y5

Mail U. S. subscriptions to:
Mosaic
P.O. Box 890
Lewiston, NY 14092-0890

Telephone/Fax: [905] 788-2674. E-mail: soleil@iaw.on.ca

Toll Free Order Desk Fax: 1-800-261-0833

Subscription Rates
(4 issues per year sent to the same address):

1-5 subscriptions $12.00 each
6-50 subscriptions $11.00 each
51 + subscriptions $10.00 each

Single copies $4.00. Back issues are available at regular subscription price.
Canadian orders please add 7% GST.
U.S. subscriptions same rate as above in U.S. currency.
Overseas subscriptions $35.00 each (Sent by air mail).
Advertising rates available on request.

Mosaic is indexed in the Canadian Education Index by Micromedia Ltd., 20 Victoria St., Toronto, Ont. M5C 2N8, Tel.: (416) 362-5211, Fax: (416) 362-6161. **Mosaic** is available on microfiche from the ERIC Document Research Service (ERDS) at 1-800-443-3742 or (703) 440-1400.

Web Conferencing Support for the Academic Writing of NESB Students

John Brine

This paper discusses the use of online web conferences as a strategy for supporting the academic writing needs of Non-English Speaking Background (NESB) students.

Introduction

Web conferences were used in an undergraduate EAP course and in two postgraduate Applied Linguistics courses. Evaluative comments made by NESB students who have used the web conferences are discussed and recommendations for classroom teachers are considered.

The Department of General and Applied Linguistics offers the University of Waikato's English for Academic Purposes (EAP) programme, the Postgraduate Diploma in Second Language Teaching (PGDipSLT), and the MA in Applied Linguistics. During the past three years, the international student population in New Zealand universities has grown steadily due to a relaxation of student visa requirements in 1997 for students from the People's Republic of China. Rising international student numbers have led to larger enrolments in the university's EAP programme and the entry of more NESB students into the two postgraduate programmes.

Web conferencing is used in the EAP credit courses to provide students with a social context and intellectual model in the acculturation process as they develop their writing and other academic skills. Furthermore, web conferences are used for related purposes by students in the PGDipSLT and the MA. While academic writing for NESB students may be covered in some high school and university second language courses, in content courses, academic writing competence is often implicitly assumed. With the use of online web conferences, courses can be designed, structured and taught to support the academic writing needs of all students in both second language and other content courses.

Cultural learning styles of NESB students

East Asian cultures, while having distinct histories and languages, are described by Scollon and Scollon (1994) as 'post-Confucian' to emphasise a shared intellectual tradition that has influenced communication patterns, social organisation, and learning styles. Most NESB students from East Asian countries have studied English in education systems that focussed on testable receptive skills such as listening and reading. The study habits, preparation tactics, and attitudes toward learning developed by students in the examination-centred system in China have been described by Cortazzi and Jin (1996). The post-Confucian learning heritage is reflected in rhetorical paradigms and writing conventions that often diverge from those expected in western universities (Hinkel, 1999). While such learning prepares students for entrance examinations and writing requirements in their home countries, it does not prepare them for study in western universities where "language is used as a tool and medium for thinking" (Ballard, 1996, p. 148) and where the emphasis is on academic writing and other literate skills.

Ballard's and Clanchy's (as cited in Ballard, 1996) model of learning approaches consists of a continuum from reproductive (i.e., memorisation) to speculative (i.e., hypothesising). This continuum lies at the heart of the academic difficulties that students face in western universities. NESB students have often been educated in systems that emphasise reproductive approaches to learning. In such systems, respect for the authority of experts and written texts coupled with the belief that their own ideas are inconsequential, for example, may lead some NESB students to plagiarise. The learning approaches given importance in western high schools and universities are more likely to be analytical and speculative (Ballard & Clanchy, as cited in Ballard, 1996) and are believed to encourage students to question.

Transition to western academic culture

Western academic culture varies depending on the country, educational institution, and the discipline or subject, but nonetheless, there are shared and recognisable theories, methodologies, and rhetorical conventions. Students from post-Confucian cultures entering into western high schools and universities are faced with academic assumptions and expectations that diverge from what they know. Differences in learning styles are fundamental to students' educational difficulties. The cultural practices that underlie the L1 writing systems of NESB university students are frequently transferred to student L2 writing (Hinkel, 1999).

The emergence of successful academic writing strategies is dependent on the development of bicultural awareness in NESB students, leading to the adoption of new learning approaches and writing behaviours (Mangubhai, 1997). Helping NESB students to adjust to the academic writing requirements in a western university depends on the cultural sensitivity of teachers. Teachers and programme developers need to be aware that choices about course design, materials, and methods reflect their own implicit understanding of source, target, and international cultures (Cortazzi & Jin, 1999). The potential role of computer-mediated communications (CMC) in supporting academic writing requirements is discussed in the following section.

Web conferencing support for academic writing

Ballard's and Clanchy's (as cited in Ballard, 1996) learning approaches continuum is similar to the distinction between knowledge reproduction and knowledge building (Scardamalia &

Bereiter,1996). Scardamalia and Bereiter (1996) and Murray (2000) have found that designing instruction to use computers for communication, rather than merely content delivery, is more likely to promote knowledge building over knowledge reproduction. CMC, such as browser-accessible web conferences, can be used to design frameworks for a structured curriculum where NESB students can explore the rhetorical style of western academic writing.

In recognition of diverse learning styles, web conferences have been used in the EAP courses to support and acculturate NESB students into the academic environment at Waikato. The exchanges possible in the context of a web-supported course differ markedly from those in the students' previous L1 education providing them with, for example, a model of non-hierarchical and reflective interactions centred on the production of academic text. The intention in using web conferences is not only to offer L2 learners a model of academic communication; the web conferences are intended to help student writers maintain an academic community outside of regular class meetings.

The courses are supported by a web-based communication forum called Web Crossing (http://www.webcrossing.com) which provides conferencing or discussion forums, and other services. Any web browser may be used to access Web Crossing, and participants may make contributions within thematically organised groups or structures. A web conference provides a coherent space where contributions are made, retained, and read. This provides more organisation than electronic mailing lists where messages are received individually.

Assigned web postings

Web conferencing is used in several courses in the programmes mentioned above, but only three courses were part of this study: an undergraduate academic writing course, a postgraduate diploma computer-assisted language learning (CALL) course, and a masters level course in second language acquisition (SLA), as summarised in Table 1. All of the courses included NESB students and all of them met on a weekly face-to-face basis for three or four hours each.

Table 1 – Courses and web conference task

Level	Content	Students	NESB	Task
2nd year	academic writing	12	12	journal & comments
PGDip SLT	CALL	14	7	questions & answers (comments)
MA	SLA	12	7	questions & answers (no comments)

In the 2nd year course, students were required to post on the web conference four journal entries with no word limit throughout a 12-week term. Each journal entry was contributed to a public area labelled with the contributor's name. Following each entry, a different student was assigned to write one positive comment and one constructive criticism so that each student wrote a total of four journal entries and four comments during the entire 12-week term. Students were asked to comment primarily on the meaning of the journal entry, rather than the surface features of the writing. The intention of the peer comment is to give students experience in a fundamental principle of a knowledge building, rather than knowledge reproduction approach to learning. The peer comments require students to develop a reflective capacity, and an awareness of audience.

In the PGDipSLT course, students were asked to read an assigned article while considering a question, the answer to which would be a major theme of the article. For 10 weeks, each student posted his or her own question and an answer to that question. The following day a different student provided one positive comment and one constructive criticism. No student's work was ever commented on twice by the same person during the term. Students were asked to comment on the suitability and meaning of the question and answer, rather than grammar, word choice, or spelling. The question and answer is intended to help students read more deeply.

The MA course provided a contrast to the other two. Similar to the PGDipSLT course, students were asked to write and answer a question and post it, but no critical comments on each other's work were required. All of the students in the MA course had been previously in courses requiring comments.

Student views about the web conference

During the eighth week of the course, all students in each of the three classes were asked to write about their views on the use of web conferencing. The students were not asked specifically to comment on writing, but rather, to reflect on the medium of the web conference and the nature of the assignments (described above). Similar to the manner in which students had commented on each other's work, they were now asked to comment freely on the use of the web conference for the course.

The comments reported here are restricted to those made by NESB students. It is interesting to note that most of the responses were cast in the form of "positive comment/constructive criticism" even though this response format was not requested. Most students in the 2nd year course commented that the posting any time from home or the university was convenient. On a technical level, no one found the web conference difficult and seemed generally to like it, with one student saying it was fun and several saying they really enjoyed it. However, some students felt ambiguous toward the web stating that while they enjoyed using it, they

disliked having other students see their written work. A representative selection of comments follows:

> "I don't care about other students seeing my work, but I don't like some classmates commenting on me. There are no reason, I just don't like." SA1

> "I could check whether I am on the right or wrong track...However, I wouldn't like it if I was with people whose first language was English, because I feel more embarrassed....Comments on my work [or commenting on others] was very good, because I can know the different point, which I couldn't find, and it helps me to think more deeply." SA2

> "It makes me more careful about what I write because I want a good comment. However, I don't like people reading my work." SA3

> "[I like to] read other people work....but [it makes] me feel embarrassed. I don't like people to read my work." SA4

> "Reading other people's work is good to learn from each other's mistakes and their point of view helps me to think more deeply....[But] I don't like to give my personal information. I didn't like others to find out my mistakes. I would hesitate. The responsibility of being a mini-teacher made me feel unsure." SA5

> "[Reading others' work] help me to learn from others...[but] I feel embarrassed from others seeing my mistakes." SA6

The foregoing comments represent the views of those students in the EAP course who recognised a benefit from the public display of their writing, but also felt uncomfortably self-conscious. Yet, as shown by the following comments, other students seemed unconcerned about classmates being able to view their work.

> "The comments on my writing also helps me to know what other people think about my work. I like it when I give comments on other people's works because this gives me practice on how to analyse others' writings." SA7

> "You could get ideas about coursework from other people if you don't know how to do your own assignment." SA8

> "I found it beneficial because I could read other person writing. So, this help me to think my writing critically. Comments help me to improve my English time after time. [The comments] help me to think [of] one subject [from] different angles." SA9

> "It's good to see each other's work and learn from each other....I find that others can help us to identify our mistake. I don't mind people seeing my work." SA10

> "It is good for us to know what the other students writing. so we will know different writing style. Sometimes I feel hard to write something. After reading other students' writing, I have some idea how to do my assignment." SA11

In the PGDipSLT course, NESB students did not express a dislike of other students reading their work. Their comments indicated a deeper recognition of the potential benefits available through the academic community of the web conference. The following comments were typical.

> "First of all, the class forum offers a ground for sharing of ideas and the exchange of opinions in which free speech is protected and reserved on academic grounds. It's a great idea to use [the web conference] where the essence of interaction and exchange is enhanced. Once we throw a question outward, there could be someone else who could answer it and is willing to serve and will do us a favour. Second, the service of asynchronous communication [among class members] in some sense offers an indirect way of communication in which conflicts and arguments may be more easily expressed." SB1

> "I've never participated in a discussion list before. The discussion list is really convenient especially when it comes to handing in assignments. Posting and commenting on each other's assignments has helped me in my writing. I became more critical in terms of what to say or write." SB2

Unlike the previously described EAP or PGDipSLT courses, the students in the MA course were not required to comment on each others' work online, although they had all done so in earlier courses. They discussed and debated course-related ideas openly in class, which was an appropriate substitute for online comments (and one goal of the emphasis on dialectic and reflection). Yet, some students seemed to lament the lack of a written comment requirement in this course..

> "Last year I considered the comments from the students as NOT the best thing to be done, but this year I missed reading the comments from other students. This year, the discussion list gave me the impression that I am doing my study alone here....Students' comments were like another way of learning, but this year without comments...I found myself lost to be honest. It was like writing to myself knowing that what I wrote would never be important to be discussed...." SC1

This may be an overstatement on the part of the student, but clearly indicates that it is possible for students to grow beyond the fear of peer feedback.

> "For me, as a non-native speaker, it is good to see the NS students' work. It does not mean to cheat or to plagiarize their work though. What I like to see from their work is the way they express their ideas in written form, and even their word choices. I consider this to be an essential part of my learning process." SC2

> "I think the discussion list has provided convenience to many students as well as me. As an NNS student I have found the class forum interesting and an excellent opportunity to share with others...." SC3

> "Questions and answers are helpful for me to understand the articles. However, I still feel embarrassed to post my own questions and answers to the list, because I think my writing is still not good enough." SC4

Contrary to this individual's

expressions of self-doubt, both written assignments and oral presentations were carried out at a high level. In particular, oral presentations were academically credible, and easily held the attention of the class.

Discussion

The world view held by western teachers may be uncertain and destabilising for NESB students. Upon arriving at a western university, NESB students are required to change their learning style at a time when they may be feeling intellectually and socially isolated, and just when they are most likely to experience loneliness and culture shock (Brown, 2000; Oxford, 1992).

Teachers considering the use of web conferences and other educational technologies must take into account student and curriculum needs.

High school and university teachers of academic writing classes often comment on the difficulties they have encouraging NESB students from post-Confucian educational backgrounds to participate and discuss issues in the classroom in front of their peers. Most students will not volunteer an answer and speak only if asked to do so. Speaking is likely to be very hesitant, with a great deal of apparent insecurity. These behaviours are often understood by local and foreign teachers of EFL conversation classes in the source culture, but less so in classes in western high schools and universities, where the teacher may not be familiar with the home countries of NESB students (Ballard, 1996).

One concern is that web conferences may create an environment, not unlike the conversation class, but in written form, where students feel vulnerable. Occasionally, I have been asked by NS postgraduate students whether the question and answer (followed by peer comments) violates the culture of NESB students. The concern seems to be that asking NESB students to comment on each other might threaten friendships. The most thoughtful response is that all students need to be prepared to engage intellectually with content and colleagues. Developing a profound understanding of the rhetorical paradigms and the academic culture of western universities is difficult for NESB students. Initially, peer exchanges on web conferences may indeed be threatening, yet, if education is to mean more than memorisation, imitation, and knowledge reproduction (Scardamalia & Bereiter, 1996), students need to learn to have their ideas and writing challenged. A large part of the academic maturation process in western universities involves learning to reflect on and verify one's own assumptions, to imagine a larger academic audience, and to convey one's findings and thoughts clearly. An NESB student in the 2nd year course expressed this notion well:

> "[In Hong Kong] the students would not have more choices or freedom of study. They can't study the [courses] which they like or are interested in. They just put all the knowledge which is taught by their teachers in their mind. They do not have enough time to think about it. In western universities, the students have more choices to exchange their experience. They are taught to think critically, or look at one matter from different angles. They have more presentation or group work in front of the class. They build up their confidence, cooperation skills, and responsibilities from these sorts of presentation." SA9

Clearly, NESB students in the three classes believe the public character of the web conference is beneficial to their thinking and writing, even if it is sometimes perturbing. The 2nd year EAP students tended to comment on surface aspects of writing even though they were instructed to focus on meaning. Some students seemed to believe that commenting meant "becoming a mini-teacher" requiring superficial corrections to spelling, grammar, and word choice. However, the deeper aspects of style, awareness of audience, topic choice, and organisational structure were largely ignored by such students. Sentence-level improvements in grammar, spelling, and vocabulary are not sufficient evidence of a deeper understanding of the requirements of writing in a western university. Student writing assignments are evaluated on a range of analytic criteria, including grammar, spelling, and vocabulary, but the purpose of the web conference is to help students internalise a sense of audience and become more familiar with the western academic paradigm.

The NESB student comments from the PGDipSLT and MA courses indicate that students mature and become more accepting of the western paradigm in the context of a web conference. However, more research is necessary to understand how web-conferencing can contextualise NESB student writing and help students to internalise a wider audience. How do NESB students use other student texts they can view? How do students interpret comments about their writing? How can teachers make effective use of web conferences for NESB learners?

Recommendations for classroom teachers

Teachers considering the use of web conferences and other educational technologies must take into account student and curriculum needs. For example, if students are expected to make a transition to western academic writing requirements, the specific problems they are experiencing must be matched to characteristics of the web conference that could address those problems. The implementation of the web conference involves more than just the technology.

The design and structure of the course is extremely important. The course outline should reflect the specific requirements of the course and clearly articulate the steps students need to take to meet those expectations. If students are expected to read each other's work and comment, then the exact schedule of comments should be provided. The precise expectations of all written assignments (including a detailed

style guide) should be provided. For example, the minimum and maximum number of words for an assignment should be stated.

Furthermore, students need to feel comfortable about the public display of writing and peer comments. In this regard, teachers must remain open to potential difficulties that some students may have with web conferences. By openly discussing varieties of academic and rhetorical styles, and their underlying assumptions, teachers can help students to overcome hesitation about peer collaboration and to develop audience awareness. Course design should be continuously refined to meet student needs.

While the use of web conferences may seem to challenge or threaten the home culture of students, the students themselves welcome the use of web conferences and are not unduly threatened by the public display of their writing. NESB students have chosen to study in a western university with all its demands to conform to western rhetorical and academic style. The challenge is to provide structured support for students to participate in the excitement of intellectual achievement.

Conclusion

Even though EFL and ESL teachers may have language teaching experience with students from a range of cultures, it would be unlikely for most other university and high school teachers to have specialised knowledge about the influences of culture on writing. For teachers lacking culture-specific knowledge, web conferences provide a context within which students are supported in their writing. The above comments from students indicate that web conferences do provide a useful framework for the transition from NESB student learning styles to the learning style expected in western universities. Web conferences can be used to operationalise a clear structure for students to work within. Teachers' expectations regarding student cooperation can be built into both the course design and the required peer interactions.

Computers are now generally recognised as communications technologies and applications of educational technology and CALL need to be understood within a socio-cultural context (Chapelle, 2000, p. 218). Web-conferencing changes the fundamental classroom communication patterns familiar to NESB students, from one-to-many to many-to-many. Even more consequential is the fact that web conferences can make student participation and information public, thus providing an audience for writing. Further research is required in order to detect not only the effects on student writing, but the effects on social interaction and isolation and how this bears on NESB students' membership and participation in a western academic community.

References

Ballard, B. (1996). Through language to learning: Preparing overseas students for study in western universities. In H. Coleman (Ed.), *Society and the language classroom* (pp. 148-168). Cambridge: University of Cambridge Press.

Brown, H.D. (2000). *Principles of language learning and teaching* (4th ed.). White Plains, NY: Longman.

Chapelle, C.A. (2000). Is network-based learning CALL? In M. Warschauer, & R. Kern (Eds.), *Network-based language teaching: Concepts and practice* (pp. 204-228). Cambridge: University of Cambridge Press.

Cortazzi, M., & Jin, L. (1996). Cultures of learning: Language classrooms in China. In H. Coleman (Ed.), *Society and the language classroom* (pp. 169-206). Cambridge: University of Cambridge Press.

Cortazzi, M., & Jin, L. (1999). *Cultural mirrors: Materials and methods in the EFL classroom.* In E. Hinkel (Ed.).

Hinkel, E. (1999). Objectivity and credibility in L1 and L2 academic writing. In E. Hinkel (Ed.), *Culture in second language teaching and learning* (pp. 90-108). Cambridge: Cambridge University Press.

Mangubhai, F. (1997). Primary socialisation and cultural factors in second language learning: Wending our way through semi-charted territory. *Australian Review of Applied Linguistics, Series* S(14), 23-54.

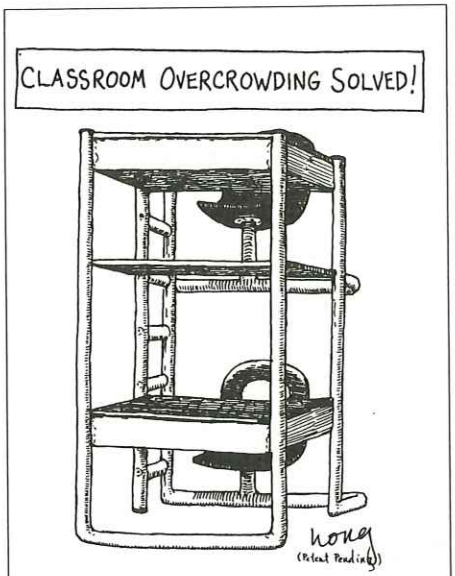
Murray, D.E. (2000). Changing technologies, changing literacy communities? *Language, Learning, & Technology*, 4(2), 43-58. Retrieved 2 October 2000 from the World Wide Web at llt.msu.edu/vol4num2/murray/default.html

Oxford, R.L. (1992). Who are our students? A synthesis of foreign and second language research on individual differences with implications for instructional practice. *TESL Canada Journal*, 9(2), 30-49.

Scardamalia, M., & Bereiter, C. (1996). Student communities for the advancement of knowledge. *Communications of the ACM*, 39(4), 36-37.

Scollon, R., & Scollon, S. W. (1994). *The post-Confucian confusion.* Research Project No. 37. Department of English, City Polytechnic of Hong Kong.

John Brine, PhD, is a lecturer in Applied Linguistics and Computer-Assisted Language Learning at the University of Waikato, Hamilton, New Zealand. His research interests include applications of network-based communications to academic and second language writing. Prior to living and working in New Zealand, John taught English as a Foreign Language in Japan for eight years.



Reprinted from *Teachers! Teachers! Teachers! A cartoon collection.* Edited by S. Gross. Chicago, IL; Contemporary Books, Inc. By permission S. Gross.

Online Web-based Discussion and Language Teacher Education: The Effects of Syllabus Design on Language Production

Marcia Johnson

This paper reports on findings from the author's on-going study of the use of computer-mediated communication (CMC) to support post-graduate, second language teacher education.

Introduction

Findings from the study are reported according to organising categories of social interaction, language use, and how different tasks affected communicative exchanges. More broadly, the paper discusses curriculum design features of technology-enhanced courses that can support both instructional practice and second language acquisition.

Background to the study

Teaching programmes

Two postgraduate language teaching degree programmes are offered in the Department of General & Applied Linguistics at the University of Waikato in Hamilton, New Zealand. Both programmes can be taken either full-time or part-time, on-campus or in distance/block mode. In the on-campus courses, students meet once per week with an instructor during a 12-week teaching term. This contrasts with the distance/block courses that run throughout the academic school year. With the exception of a five-day, on-campus teaching week, distance students work through course materials and seldom (if ever) meet face-to-face with the instructor or each other once the teaching block has finished.

The course

The course being discussed here was offered in 1999 in distance/block mode with the course content being computer-assisted language learning (CALL). On-campus tuition was provided in April 1999. During the teaching week, students spent approximately four hours over two days in the computer lab and were shown how to access web-based discussion software and how to write, edit, and post comments. After the on-campus tuition was finished, students used computers to complete assessed course work.

Students were required to complete a variety of online tasks including regular use of web-based discussion as well as other computer-based and academic writing tasks. This paper will focus only on the various interactions and discussions that occurred when online discussion was used for both required and optional course work.

The students

All students in our programmes are adult learners and many are employed either full-time or part-time as language teachers. There were twenty students enrolled in the CALL course with seven (35%) being from non-English speaking backgrounds (NESB) and thirteen (65%) being native speakers of English.

The software

We used an online, web-based discussion software package called Discus. Within the software all discussions are public, which meant that all participants could read anything written by anyone in the course, but because access to Discus is password-protected for each separate course at the University, only enrolled students could read or participate in our discussions. Use of Discus is relatively straightforward for students and different discussion themes can be created, by the instructor, and tailored to the specific needs of the class.

The required task and optional activities

The required task involved the students in reading content-based (CALL) articles from a course readings book (approximately two papers per week, 24 in total), developing a focus question about each article's content, and then answering their own question. Students then needed to summarise the gist of the article in no more than 150 words.

On a weekly, rotating basis, and following a schedule developed by the teacher, one student posted one question and answer on Discus. Three other students read it and then wrote and posted one positive comment and one constructive feedback comment. One other student was designated as the weekly moderator for each particular discussion. S/he read the question and answer and all posted feedback and then wrote a short summary of the week's discussions which was sent to the teacher via email (it was not a public document).

The participation schedule specified clearly the days and times for posting, commenting, and moderating and all students were expected to know when they were required to participate. Other students who were not required (scheduled) to contribute to a particular weekly discussion were nevertheless encouraged to do so, but their participation was optional. Students were assessed on the required task, but they were not assessed on any additional contributions they made to the weekly article discussions.

Students were also encouraged to use Discus to explore general aspects of language teaching and learning, but this activity was optional. There were six discussion areas in which students could post comments with the topics being assignments, class announcements, general student discussion, conference and academic discussion, software discussion, and web-site discussion. Although the actual amount of text generated through both the required task (27,942

words) and the optional discussion areas (30,567 words) was similar, the purposes and focuses of the communication were different. These differences form the basis of discussion in the remainder of the paper.

Summary description of the data

The data are the text-based transcripts of what was posted on Discus, both by the students and by me, as part of the required task and the optional activities. As I had qualitative, text-based data, I examined it from two related perspectives. First, the data were quantified to determine how successful the task structure had been in terms of overall participation rates. Second, the data were examined in a more qualitative manner in which texts were read and reread and categorised according to major themes that emerged from the data. Both of these approaches are appropriate for summarising qualitative, text-based data (Burns, 1999). Given space limitations, only a subset of findings will be reported here.

The required task

The completion rate for the required task was virtually 100% and further, the focus of the discussions was entirely related to the article's content. During the 21 weeks of the course, there was only one potential incidence of communicative breakdown among the students, and this was resolved with minimal intervention from the teacher. Although on average, the native speakers of English wrote more each week than their non-native speaking peers, the difference was relatively small and both groups were writing more than was required for the task. The teacher spent much of her time keeping the conversation flowing through the use of 'expressives', those speech acts that convey sympathy, encouragement, apologies, and so on, but when necessary, she provided additional academic support for ideas being discussed.

Optional activities

Nineteen out of the twenty students posted at least once in the optional area. Approximately 90% of their postings were related to academic and social issues with only 10% being concerned with administrative requests. Given that the students were studying in a distance/ block format, this suggests that for many students, web-based discussion was a useful tool for supporting and continuing the classroom group dynamic that had been established during the on-campus teaching week. In the case of the teacher's contributions, almost 50% were of an administrative nature and many were made in anticipation of problems that students might encounter with course work. Few of her postings were social, but were predominantly 'expressives', and could be considered as contributing to the positive social dynamic of the group.

Discussion

Aspects of online learning

It is important when discussing this study to consider general criticisms of online learning. Knobel, et al (1998) cite an Australian study in which an email listserv was used in graduate language teacher education. Students completed a variety of required tasks, but were also encouraged to communicate more generally with each other (and the instructor) about any ideas that they felt were relevant to their course. The researchers found that almost 70% of the email messages were related to a required task, but of the remaining (voluntary) email exchanges (30%), most were sent only to the lecturer, not to the entire group. In fact, contrary to encouraging the development of autonomous learning, the researchers believed that students became more dependent on the lecturer as most of their messages were to seek clarification of assignment requirements (Knobel, et al, 1998, pp. 42-45).

An essential point in their paper was that students encountered numerous technical problems using email, but there was scant institution-based support for them when this happened - frequently, they had to 'go it alone'. These findings parallel those of Hara and Kling (2000), who reported high levels of student frustration and distress in an online course. In their research, students also encountered many technical problems, but received little support from their instructor who was herself a novice computer user.

However, this was not the case here although one student, while completing another required task (not described in this paper), became frustrated and the teacher had to assist on a couple of occasions. Otherwise, students in this course wrote about issues related to course content on a regular basis throughout the year and managed to solve their technical problems either through direct email contact with the teacher, family members (some students reported that their children helped them solve technical difficulties), advice from other students, or work-based computer consultants. With only one exception, all students wrote much more than what was required, and there was considerable evidence of spontaneous sharing of information, related not only to course content, but also to language teaching in general. I believe that this result was linked closely to a variety of factors related to overall course organisation, including establishment and support of group dynamics, task structure, and contributions from the teacher. Further, all of these factors have wider implications for teaching and learning in computer-supported language teaching environments.

Group dynamics

Dörnyei and Malderez (1999, pp. 158-163), in their discussion of group dynamics for cooperative classrooms, describe four general phases in the development of groups: group formation, transition, performing, and dissolution. As the name implies, group formation refers to the initial establishment of the group (activities might include, learning people's names and setting initial group goals), while transition is the period during which time group values, standards, rules, inter-member relations and norms emerge through the interactions of participants. During the performing stage all participants know what is expected of them and typically an increase in cooperative work and group cohesiveness is evident. In-

creasingly, the group becomes self-organised. Dissolution can be an emotionally charged time during which group members say goodbye; evaluation of what has been accomplished is done; and any unfinished business is completed.

During the on-campus week, the teacher explicitly planned activities so as to aid the group formation and transition stages, and students worked on a variety of cooperative tasks in the computer lab and in the classroom. For example, everyone evaluated a language teaching web-site and then made an oral presentation (with a partner) to the entire class. As many of the students would not see each other again once the teaching block was finished, it was essential that positive inter-member relations were formed, and that the teacher's expectations about what needed to occur during the rest of the course were firmly established. It was equally important for students to seek clarification and negotiate any modifications to course requirements, for once they left the classroom, they had to rely on Discus to sustain a cooperative group dynamic during the performing and dissolution stages of the course. Haythornthwaite, Kazmer, Robins, & Shoemaker (2000) in their discussion of the role of CMC in distance learning also stress the importance of face-to-face group establishment and transition before communication shifts to an online mode.

Web-based discussion is clearly different from that of email in which private one-to-one communication is easily supported. I would conjecture that since private communication with the teacher was so easy in the study reported by Knobel et al. (1998) that students relied on it. However, when all discussion is public and structured within clearly defined themes, the group-based nature of that communication can promote and sustain cohesive and supportive behaviours. Students could communicate with the teacher privately through email, but if they asked a question which might be of interest to the entire group, they were asked to post it on Discus. Also, the teacher anticipated questions about process and could often post directives before problems arose.

Task structure

In addition to the key role that group dynamics played in the course, a second essential aspect was task structure. Students had a clearly specified timetable so that they could plan and be prepared for required online tasks. While student autonomy was encouraged by inviting anyone to make additional comments at their convenience, a timetable of core, compulsory participation was needed as the 'backbone' of the task. As long as there was always something new for students to read and reflect upon, the task could roll along with very little intervention from the teacher. What was required, then, was a careful balance between compulsory and free participation. Moreover, this type of balance is different from what is found in the regular classroom where the teacher can direct, facilitate, or manage group participation through her own physical self and use of language. When the teacher is not physically present, task structure has to sustain the group dynamic in an online mode, and frequent use of 'expressives' in the teacher's language is essential in this 'performing' stage of the course.

Another key feature of the assessed task was that it focussed on content-related issues, rather than just being a discussion of any topic. Because students were reading and discussing articles on a regular basis while online, they began to build a shared knowledge of CALL-related issues. Moreover, when they were online, they could 'visit' the optional discussion areas because it was convenient to do so as part of the software's structure.

Although students read about peer evaluation in other courses, they had few opportunities to actually do peer evaluation. By reading articles and writing summaries (which then became public documents), the students could obtain regular peer feedback, and they could also model each other's writing. Not only did the required task and optional activities provide far more opportunities to read 'authentic' academic English than one teacher could ever provide, they provided many chances for students to write for a 'real' audience. This was beneficial for all students regardless of their first language.

Role of the teacher

Hara and Kling (2000) reported numerous problems in an online course and several of these involved the teacher. Much has been written about the role of the teacher in a constructivist classroom (Freeman & Richards, 1996) and a view of the teacher as a 'facilitator' of learning rather than as the source of knowledge is common. But, what does it really mean to be a 'facilitator' in an online learning environment when there is no physical body?

In practical terms, it meant that the teacher had to establish and maintain her presence, through written expressives and directives, on a regular basis throughout the year. Overall, she wrote more than 10,000 words, which may seem like a large number but when averaged over 21 weeks of the course, it is not. In a regular classroom, a teacher would produce far more language than this. However, the question of shifts in teacher workload is an important one and must be considered carefully.

I do not believe that the amount of work for the teacher necessarily increases in an online environment, but it certainly involves a change to how one conceptualises and 'does' teaching. While in the traditional classroom, the teacher walks and talks as part of the teaching process, in online teaching, the teacher sits and types. Much of what we do anyway in the modern university involves sitting and typing, and thus it is essential to develop a clear schedule for when one does online teaching. Because it is very easy to login anytime and browse course discussions, there exists the real potential to spend too much time doing it. As with face-to-face teaching, which typically occurs within clearly defined time-slots, the online teacher needs to allocate blocks of time to teaching, and refrain from checking online work outside of those times. Failure to establish clear time limits,

with students, colleagues, and self, can lead to unreasonable expectations about the teacher's participation in a course.

Implications for the language teaching classroom

Although the main focus of this course was not second language teaching, I believe that teachers can use CMC effectively in the language classroom and an increasing number of graduates (practising language teachers) and colleagues are doing so. As with the course described in this paper, they design clearly scheduled tasks and require students to participate in public discussion of ideas. For example, Hall (personal communication, 2000) used web-conferencing software to support teaching in an undergraduate German course. On a rotating, weekly basis, students were required to select a topic for discussion and then write a couple of paragraphs (in German) to start the flow of ideas. Other students then made their contributions and at the end of each week, a German-speaking teacher provided students with formative feedback and explicit suggestions for improving their writing. In a similar example, students studying English at the University of Waikato Language Institute used web-conferencing and posted topics of their choice (in English), then other students joined the discussion. At the end of each week, the teacher read the transcripts and edited each student's contribution to indicate grammatical errors. The editorial markings were incorporated into the online postings and became part of the public discussion. Unlike the German course, in which explicit grammatical feedback was given, this teacher merely indicated the existence of errors. It was up to the students to reflect on their writing and rewrite passages where necessary (Ellis, personal communication, 2000).

In both cases, the teachers found that CMC was a very effective tool for raising students' self-awareness of their own language use. Since all discussions were text-based and easily retrievable, students had increased opportunities to read and to notice salient aspects of grammar and different ways of expressing ideas in written form. The importance of 'noticing' in second language acquisition has been described often in academic literature (Ellis, 1994).

Computer-supported learning, then, becomes an important tool for supporting authentic public discourse in the target language and can significantly increase the amount of reading and writing that students do in their courses. CMC provides students with opportunities to practice and learn from peer evaluation techniques within structured and safe learning environments, and it can also be a valuable tool for helping overseas students adjust to the cultural and academic norms of a western university (see Brine, this issue). The benefits of cooperative group work and peer evaluation for second language acquisition and for second culture acquisition are becoming well- established in academic literature (Crandall, 1999).

Conclusion

In order for the potential of technology to be realised in teacher education and in language teaching classrooms, a rethinking of how we structure and do teaching is required. If we want teachers to use CMC in their classrooms, then explicit training and practice in using discussion tools for language teaching need to be included in teacher education programmes. Students should be provided with multiple opportunities to learn about computer tools and experience different types of tasks and assessment techniques to support personal learning in all of their teacher education courses. A positive side-effect is that they will be better equipped to handle technical breakdowns themselves, or know how to communicate effectively with technical support staff.

Richards (1998) in his discussion of teacher education states that although we can provide explicit instruction of how to teach, it is the personal aspects of a teacher's life that shape and determine what a teacher actually does in the classroom. If teachers have had a variety of positive learning experiences in computer-supported learning environments, then I would conjecture that they would be far more confident, skilled, and motivated to use computers with their own language students.

What I have described in this study is the use of one particular type of collaborative task to stimulate online discussion, but there are many other possibilities for task design. For example, Grabe and Kaplan (1996) discuss a variety of task-based approaches, in the traditional classroom, for stimulating group-work in writing environments and some of these could be adapted to an online format. Regardless of the tasks implemented, learners need explicit structures and detailed organisational systems so that online written communication can be initiated and continued. In addition, explicit consideration of models of continuous assessment in online learning (Johnson, 1999), task design to support cooperative group work (Oxford, 1997), and activities to establish positive group dynamics (Dörnyei & Malderez, 1999) are also essential when a syllabus is designed for computer-supported learning.

Because language teaching has shifted to a more communicative approach, it makes sense to use computer-mediated discussion tools to support public, authentic language exchanges, and such an approach is highly consistent with theories of how second languages are learned (Byrnes, 1998). With effective teacher training, careful syllabus planning, and thoughtful evaluations, we can implement effective and exciting online learning environments for second language teaching and learning.

References

Burns, A. (1999). *Collaborative action research for language teachers.* Cambridge: Cambridge University Press.

Byrnes, H. (Ed.). (1998). *Learning foreign and second languages: Perspectives in research and scholarship.* New York: The Modern Language Association of America.

Crandall, J. (1999). Cooperative language learning and affective factors. In J. Arnold (Ed.), *Affect in language teaching* (pp. 226-245).

Cambridge: Cambridge University Press.

Dörnyei, Z., & Malderez, A. (1999). The role of group dynamics in foreign language learning and teaching. In J. Arnold (Ed.), *Affect in language teaching* (pp. 155-169). Cambridge: Cambridge University Press.

Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.

Freeman, D., & Richards, J. C. (1996). *Teacher learning in language teaching*. Cambridge: Cambridge University Press.

Grabe, W., & Kaplan, R. B. (1996). *Theory and practice of writing*. London: Longman.

Hara, N., & Kling, R. (2000). Students' distress with a web-based distance education course. *CSI Working Paper* [Essay]. Retrieved 16 February 2000 from the World Wide Web at http://www.slis.indiana.edu/CSI/wp00-01.html (note change of title March 30, 2000).

Haythornthwaite, C., Kazmer, M. M., Robins, J., & Shoemaker, S. (2000). Community development among distance learners: Temporal and technological dimensions. *JCMC*, 6(1). Retrieved 2 October 2000 from the World Wide Web at http://www.ascusc.org/jcmc/vol6/issue1/haythornthwaite.html

Johnson, E. M. (September, 1999). CALL and teacher education: Issues in course design. *CALL-EJ Online*, 1(2) [Verified 10 April 2001]. Available: http://www.lerc.ritsumei.ac.jp/callej/4-2/contents1-2.html

Knobel, M., Lankshear, C., Honan, E., & Crawford, J. (1998). The wired world of second-language education. In I. Snyder (Ed.), *Page to screen: Taking literacy into the electronic era* (pp. 20-50). London: Routledge.

Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, 81(iv), 443-456.

Richards, J. C. (1998). *Beyond training*. Cambridge: Cambridge University Press.

Marcia Johnson, PhD, is a lecturer in Applied Linguistics and Computer-Assisted Language Learning at the University of Waikato, Hamilton, New Zealand. Her research interests include the design and evaluation of computer-supported learning environments. Marcia used computers to teach EFL at a business university in Japan before moving to Japan.

Appendix 1: Summary tally of required postings

Week	Student posts	Teacher posts	Total posts	# of posted words-Students	# of posted words-Teacher	Total words posted
1	6	2	8	1393	157	1550
2	5	2	7	967	111	1078
3	5	2	7	930	110	1040
4	9	1	10	2260	70	2330
5	12	2	14	1845	495[1]	2340
6	5	1	6	676	172	848
7	7	2	9	930	455[2]	1385
8	8	1	9	1278	119	1397
9	10	2	12	1816	391	2207
10	4	1	5	1047	128	1175
11	6	1	7	1328	225	1553
12	5	0	5	1048	0	1048
13	6	1	7	819	206	1025
14	3	0	3	469	0	469[3]
15	5	0	5	1207	0	1207
16	7	1	8	1173	144	1317
17	4	1	5	813	185	998
18	4	2	6	804	370[4]	1174
19	6	1	7	1148	125	1273
20	5	1	6	410	108	518
21	6	2	8	1557	453[5]	2010
Total	129	25	154	23918	4024	27942

1 Explicit teaching
2 Explicit teaching
3 Unpopular article
4 Explicit teaching
5 Clarification of procedures for final assignment submission and explicit teaching

Electronic Message Boards in the Foreign Language Classroom: An Unexplored Forum for Computer-Mediated Communication

Rebecca L. Chism

The push to incorporate technology into the foreign language curriculum has been a dominant trend in the latter half of the twentieth century and the beginning of the twenty-first.

Introduction

As a result, the foreign language classroom has witnessed the tremendous evolution of computer technology as a means to implement various methods of instruction. Never before have students had such extensive access to information and immediate potential for interaction. Consequently, there has been a rapid movement to document and assess the possibilities of these technologies for second and foreign language teaching and learning.

However, despite the existing body of research on the use of computers in the second and foreign language classroom, often the technologies are progressing faster than the research on them. As a result, educators and administrators are not always fully aware of the potential and ideal uses of such tools for the second and foreign language classroom.

One such example of this appears to be the electronic message board. The dearth of information on the use of the electronic message board is surprising, since this forum may prove to be a useful pedagogical tool for the second and foreign language classroom due to its unique capabilities. Given the potential uses of the electronic message board, the goal of this article is to provide a more holistic view of this technological development vis-à-vis other forms of computer-mediated communication (CMC). In addition, student reaction to the use of an electronic message board will be considered, as will recommendations for its use in the second and foreign language classroom.

Computer-Mediated Communication: An Overview

CMC research in the field of second language acquisition first appeared in the mid 1980's. The volume of research has increased rapidly as second and foreign language teachers have gained access to and incorporated the various applications provided by computer technologies. CMC offers an unprecedented medium in that human interaction can take place in a text-based format, enabling both the "interactional and reflective aspects [of speech and writing] to merge into a single medium" (Warschauer, 1997, p. 472). Worldwide service networks allow users to communicate virtually instantaneously with one another through systems such as electronic mail, electronic conferencing, and message boards.

This technology first began as a communications medium with potential for military, scientific, and technical work and was initially valued as a means to benefit the research community. However, Baird and Borer (1987) recognised the potential of CMC not only as a research medium, but as a social medium as well. Such communication they refer to as the "grapevine alternative."

The most common of CMC forums is electronic mail, or e-mail. Oliva and Pollastrini (1995) define electronic mail as "a protocol that permits the exchange of messages worldwide, from user to user or from user to a list of users, over the Internet" (p. 552). These messages can be sent and received in a synchronous (same time) or asynchronous manner (different time), although the latter is more common. Lunde (1990) promotes the use of electronic mail for the second and foreign language classroom for its efficiency and speed, low cost, and ease of storage. In addition, electronic mail has been used to promote collaborative work and other types of interaction in the second and foreign language (Kern, 1996; Suozzo, 1995).

A recipient can access electronic mail at any time; hence, it is considered a form of asynchronous communication. Sometimes, however, electronic mail can be used in a synchronous manner (Kroonenberg, 1994/1995), which makes it similar to electronic conferencing, in that its users are able to communicate in the amount of time that it takes to type and send the message. With electronic conferencing, users can engage in a textual conversation where they can practice the target language and/or collaborate on projects (Beauvois, 1992; Chávez, 1997; Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1997).

Thus, the asynchronous and synchronous uses of online communication provide a potentially useful forum for collaborative language learning and comprehension to take place through the creation of socially-based communities. While most of the research to date has dealt with electronic mail and electronic conferencing, the electronic message board has been relatively unexplored as a tool for the second and foreign language classroom, despite its capacity for both the immediacy of synchronous conversation as well as the accessibility of asynchronous communication. The potential of the electronic message board warrants further exploration into its use as a medium for socially-determined constructs in the second and foreign language classroom.

Electronic message boards

While the electronic message board has enjoyed popularity in the

worlds of business, government, grass-roots organisations, music, and celebrity, it has appeared only minimally in the second and foreign language classroom. Designed initially to emulate a cork message board, the original system, which debuted in 1978, was designed for the posting and reading of messages (Aboba, 1993). Today's electronic message board remains largely the same in that users send and receive messages and files through the use of a modem. The board displays messages in a threaded format that allows its users to post information, questions and comments as well as responses to previous postings. The structure of this system makes it easy to read selectively and reply accordingly.

The electronic message board provides the option of a moderated format, allowing the coordinator of the system to review each message before it is distributed to the board, which can be especially helpful in maintaining topic-appropriate postings. In addition, the electronic message board does not need special requirements beyond the capacities of most computers and is relatively easy to set up and operate. Most message board servers are available free of charge and simply require downloading and web access.

The electronic message board is unique in that it incorporates both the asynchronous capabilities of electronic mail as well as the synchronous capabilities of electronic conferencing. For example, as with electronic mail, the users of the electronic message board have an opportunity to reflect on or modify their posting before sending it, thus giving them more control over their contributions and more opportunities for success. However, unlike electronic mail, the messages posted on an electronic message board are available to all users through a single site, which can be accessed at the same or at different times. When users are connected at the same time, the electronic message board acts as a form of electronic conferencing in its ability to engage a community of users in real time conversations. Yet, it differs from more typical forms of electronic conferencing in that the string of messages does not disappear after a few lines and remains accessible. This feature makes the electronic message board useful for reference and tracking purposes in that it easily allows users to read the entire progression of initiation and response and to observe the process of interaction from its inception to its conclusion.

Thus, as a medium for online communication, the electronic message board offers an unparalleled mélange of both speech and writing that not only elicits dialogue, but also preserves it. The capacity of this instrument to preserve text offers unprecedented insight into the processes involved when constructing a socially determined activity. Although text-based interaction has been studied before in terms of dialogue journals (Peyton and Reed, 1990) and paper exchange of comments with peers, computer-mediated technology allows this discussion to take place online. CMC forums not only maintain the characteristics of other types of text-based interaction, they also allow for editing, response, clarification, and negotiation that is immediate and easily documented.

The potential benefits of electronic message boards are supported by various studies on the use of various forums of CMC in the second and foreign language classroom. Oliva and Pollastrini (1995) and Warschauer, Turbee, and Roberts (1996) reported findings of greater student autonomy, greater equality in the classroom, a movement from teacher-centred to student-centred learning activities, and improved learning skills with the use of synchronous communication. Chun (1994) and Kern (1995) also reported that students produce more target language output in CMC environments than in oral discussions in traditional classes. In addition, CMC forums provide opportunities for users to be a part of a virtual community of learners (Haynes and Holmevik,1998), to develop and maintain relationships (Barson, Frommer and Schwartz, 1993), and to engage in negotiated interaction (Warschauer, 1997). Particularly for the shy student who will not speak in class, this technology is considered an alternate means by which the student can display competence in a manner that is less anxiety provoking than face-to-face interaction. The rapid input and response of face-to-face discussions often result in an increase in a type of anxiety that MacIntyre and Gardner (1991) refer to as "communication apprehension anxiety" (103). CMC allows users extra time to contemplate their responses, which is believed to facilitate motivation, comprehension, interaction, reflection, and internalisation (Beauvois, 1992; Chávez, 1997; Warschauer, 1998).

Another considerable advantage of the electronic message board is that it constitutes a viable alternative to face-to-face conversation when such conversation either cannot take place or additional discussion is needed. Chism (2000) compared the use of the electronic message board compared to the use of face-to-face discussion. Dividing an introductory third-semester college French class into four groups, Chism asked two of those groups to discuss a short foreign language literary text synchronously via the electronic message board and the other two to discuss the text face-to-face. The same procedure was used again with another short story, only this time the groups were reversed. Thus, all participants had the opportunity to use both forums for discussion purposes. They then were asked to reconstruct the story individually through a recall protocol, where they had to write down everything they understood about the story. By examining the recall protocols that emerged after the discussions via both forums, Chism determined that the comprehension levels were similar regardless of whether the students discussed the stories in the context of the electronic message board or face-to-face conversation. This finding supports the position that comprehension that occurs via electronic message boards is comparable to that via face-to-face discussions, and given the asynchronous and synchronous features of the board, discussions can take place at any

time, outside the limits of space and time.

Student Reaction

Chism (2000) also considered student reaction to the use of the message board as compared to face-to-face discussion. When asked to indicate which mode they prefer overall, 56 percent of the students indicated that they prefer the face-to-face format for conversations, 27 percent prefer the message board format, and 17 percent prefer a combination of both.

When asked why they prefer the face-to-face format, they listed several reasons. First, they claimed that it is easier to express ideas verbally and nonverbally in a face-to-face format. Many also said they feel they are able to accomplish more through the face-to-face discussions because it offers more opportunities for discussion and explanation with faster feedback from their classmates. As one student wrote, "ideas come too fast to type in and post." They also believe that face-to-face interactions are more intimate and personal: "it seemed less complicated and more fulfilling in the face-to-face discussions." They indicated that they enjoyed the face-to-face social interaction with their peers. In fact, when asked if they prefer discussing literature with their classmates or if they would rather work on their own, an overwhelming majority claimed they prefer working with their classmates, regardless of the format used for discussion.

On the other hand, many students preferred the electronic message board to the face-to-face format. They felt they could devote more time and attention to reading and understanding the stories. They were able to focus on the activity more intently, and thus more effectively. Also, some believed the computer gave them more of a chance to express their opinions more freely and without interruption. In addition, it seems to give the anxious student a means to participate without embarrassment. One student wrote, "If I didn't know something, people could not tell as easy." They appear to have enjoyed using the technology for discussion purposes.

Students listed their main difficulties with the activity as either technical (i.e. it took too long to use the message board, it took time to get used to) or linguistic (i.e. the vocabulary was too difficult, the verb forms were unfamiliar). While some were "glad to learn about the technology," others were "frustrated by the computer." When asked whether they would prefer to use the computer for this type of activity in a classroom setting or from home they were equally divided. For those who prefer the classroom setting, they cited "structure" as the primary reason, while those who prefer the home setting cited "focus" as the primary reason.

However, nearly all the students, even if they preferred one mode to the other overall, indicated that a combination of both face-to-face and message board would be most effective for use in the second and foreign language classroom. For example, one student wrote:

"On the computer, the communication is slower because you have to take the time to read what everyone else has written. In group interaction, you get quicker response, but they are both effective. I think you get the same results either way."

Another student noted: "I have no real preference, both get the job done, I just think the computer is more fun and an interesting way to learn." They see the computer as a nice change from the normal routine, as echoed by another student:

"The computer interaction is perhaps a bit slower than simply talking with each other, but it is very important, I think, considering the times we live in. It is also a fun activity and a nice change from normal group work."

Yet another stated, "I thought it was a nice change from the normal way people do group work. It was fun to talk on the computer and the results are the same." As a whole, most of the students indicated a combination of both face-to-face and message board would be an interesting and innovative way to discuss literary passages for better understanding and expression of ideas.

Limitations

While there are many potential advantages to the use of CMC forums in the second and foreign language classroom, it is important to also consider any possible limitations or disadvantages. For instance, Meunier (1997) takes note of several technical problems that can occur while using CMC forums, such as difficulties in posting or overloading of messages. Moran (1991) writes that an overload of messages can result in monologues instead of true discussions. Further, while the anonymous option of some conferencing programs can help to alleviate anxiety, other studies (Janangelo, 1991; Kelm, 1992; Meunier, 1997; Sproull and Kiesler, 1991) point out that the same anonymity may increase the problem of "flaming," or the use of inappropriate language and criticism. Moreover, both Kelm (1992) and Freiermuth (1998) mention the considerable amount of time that synchronous CMC can demand, particularly in terms of technical support, training, and usage. Therefore, educators and researchers should anticipate and plan for some of these limitations when considering the implementation of CMC forums for the second and foreign language classroom.

Conclusion

The electronic message board offers many of the same advantages as other forms of CMC. In addition, the features of the board tend to discourage users from dominating the conversation and from interrupting one another, thus encouraging more active participation with others. It is also worth noting that the electronic message board also offers advantages not found with other types of CMC technologies. For instance, the combination of synchronous and asynchronous features provides a myriad of possibilities for application to the second and foreign language classroom. This type of technology can be used either in class or outside of class, thus increasing the opportunities for students to interact with one another, offering a unique forum in which to engage in discussions. The synchro-

nous and asynchronous uses of the electronic message board offer students a number of opportunities to interact with each other and can be used for a variety of purposes: discussing short stories in a foreign language text, planning group assignments, helping with homework, writing dialogues, conversing and writing in the target language, and other activities that are dependent on interaction. In fact, allowing learners to engage actively in meaningful discussions of literary text via the electronic message board may have profound implications for the way reading is taught in the foreign language classroom. With the opportunities that technology provides, group discussions that once occurred face-to-face can now occur in an electronic format. These findings are especially pertinent in light of the increased use of technology in the face-to-face classroom as well as the growing development of distance learning and other non-traditional learning situations. The only drawback to the use of this technology for synchronous discussion purposes appears to be in the time it takes to post messages. While the time delay is only a few seconds, nevertheless, it is not as immediate as face-to-face discussion. However it is likely that future versions of the electronic board will address any technical delays. Further investigation into the use of the electronic message board can provide additional information regarding the options available for applications to the second and foreign language classroom.

References

Adoba, B. (1993). *The Online User's Encyclopaedia: Bulletin Boards and Beyond*. Reading, MA: Addison Wesley Publishing Company.

Baird, P. M. & B. Borer (1997). An Experiment in Computer Conferencing Using a Local Area Network. *The Electronic Library* 5.3 162-9.

Barson, J., Frommer, J. & Schwartz, M. (1993). Foreign Language Learning Using E-mail in a Task-Oriented Perspective: Inter-University Experiments in Communication and Collaboration. *Journal of Science Education and Technology* 2.4 (1993): 565-84.

Beauvois, M.H. (1992). Computer-Assisted Classroom Discussion in the Foreign Language Classroom: Conversation in Slow Motion. *Foreign Language Annals* 25, 455-63.

Chávez, C. (1997). Students Take Flight with Daedalus: Learning Spanish in a Networked Classroom. *Foreign Language Annals*, 30,1, 27-37.

Chism, R. (2000). *A Vygotskian Perspective on Electronic Bulletin Boards: An Exploratory Study.* Unpublished dissertation: The Florida State University.

Chun, D. (1994). Using Computer Networking to Facilitate the Acquisition of Interactive Competence. *System* 22,1, 17-31.

Freiermuth, M. (1998). Using a Chat Program to Promote Group Equity. *CAELL Journal*, 8, 2, 16-24.

Haynes, C. & Homevik, J.R. (Eds.). (1998). *High Wired: On the Design, Use and Theory of Educational MOOs*. Ann Arbor: The University of Michigan Press.

Jangelo, J. (1991). Technopower and Technoppresssion: Some Abuses of Power and Control in Computer-Assisted Writing Environments. *Computers and Composition*, 9, 47-63.

Kelm, O. (1992). The Use of Synchronous Computer Networks in Second Language Instruction: A Preliminary Report. *Foreign Language Annals*, 25, 441-54.

Kern, R. (1996). Computer-Mediated Communication: Using E-Mail Exchanges to Explore Personal Histories in Two Cultures. In Warschauer, M. (Ed.) *Telecollaboration in Foreign Language Learning*. Manoa: Second Language Teaching and Curriculum Center. 105-130.

Kroonenburg, N. (1994/5). Developing Communicative and Thinking Skills Via Electronic Mail. *TESOL Journal*, 24-27.

Lunde, K. (1990). Using Electronic Mail as a Medium for Foreign Language Study and Instruction. *CALICO Journal*, 7,3, 68-78.

MacIntyre, P. & Gardner, R. (1991). Methods and Results in the Study of Anxiety and Language Learning: A Review of the Literature. *Language Learning*, 41, 85-117.

Meunier, L. (1997). Affective Factors and Cyberteaching: Implications for a Postmodern Pedagogy. *CALICO Monograph Series*, 4, 122-32.

Moran, C. (1991). We Write, But Do We Read? *Computers and Composition* 8, 51-61.

Oliva, M. & Y. Pollastrini (1995). Internet Resources and Second Language Acquisition: An Evaluation of Virtual Immersion. *Foreign Language Annals*, 28, 4, 552-63.

Peyton, J.K. & Reed, L. (1990). *Dialogue Journal Writing with Nonnative English Speakers*. Alexandria: TESOL.

Sproull, L. and S. Kiesler (1991). *Connections: New Ways of Working in the Networked Organization*. Cambridge, MA: MIT Press.

Suozzo, A. (1995). Dialogue and Immediacy in Cultural Instruction: The E-Mail Option. *The French Review*, 69,1, 78-87.

Warschauer, M. (1997). Computer-Mediated Collaborative Learning: Theory and Practice. *The Modern Language Journal*, 81, 4, 470-81.

Warschauer, M., Turbee, L. & Roberts, B. (1996). Computer Learning Networks and Student Empowerment. *System*, 24,1, 1-14.

Rebecca L. Chism is an assistant professor of foreign language pedagogy at Kent State University. She obtained her Ph.D. in French with a concentration in second language acquisition from Florida State University and holds a M.A. in French from Middlebury College and a M.A.T. from the University of Louisville.

The Context of ESL Computer Literacy: Participants, Technology, Language, and Content[1]

Dawn E. McCormick and Susanne McLaughlin

In second language (SL) classrooms, computer literacy (CL), just as language, can be simultaneously a tool of instruction and the object of instruction.

Introduction

This duality adds to the complexity of CL/SL instruction. A first step in adapting and developing techniques for teaching CL in SL contexts is to understand the dynamics of key instructional components. The purpose of this article is two-fold: (a) to explain the roles of participants, technology, language, and content when planning and implementing CL lessons and offer suggestions regarding these components, and (b) to provide an example to illustrate the application of these components.

A Definition of Computer Literacy

No clear consensus as to what it means to be computer literate exists. Most often a definition of computer literacy is constructed to reflect the context of use or instruction. At its broadest, computer literacy is defined as the ability to use a computer and computer applications. For the purpose of this paper, computer literacy is defined as the micro and macro computer skills related to general academic computer use, including word processing, e-mail, presentation software, and the World Wide Web (WWW)[2].

Theoretical Background

When faced with the additional challenge of teaching CL skills, SL teachers need to develop or change teaching practices. To rethink and reorganise instructional practices, they must first understand the context in which teaching and learning occur. This attention to context follows the tenets of sociocultural theory (cf. Vygotsky, 1986; Wertsch, 1991), which serves as the theoretical underpinning for the observations and suggestions made in this article. An instructor who holds a sociocultural perspective (i.e., a social constructivist perspective) views learners as active participants who co-construct knowledge through mediation within a sociocultural context. A change in instructional context, then, creates a change in the learning and therefore teaching within that context. Reagan (1999) states that:

> "...constructivist learning theory would require that we attend seriously to the context in which language learning takes place - recognizing, for instance, that the methods and activities that facilitate language learning in one context might differ significantly from those in another. (p. 421)"

The addition of CL to SL learning, therefore, generates changes in context that must be considered when planning and implementing lessons.

The introduction of computers is one specific change in the SL instructional context. When considering the role of the computer from a sociocultural perspective, one does not view it simply as hardware. Computer hardware by itself could alter the instructional context in a minimal way. For example, students may have to change where they sit. Teachers, however, must consider the dynamic interaction of hardware, software, students, teacher, and task. Burnett (1999) states that for the purpose of her research on understanding the impact of computer technology on teaching practice "...the computer was viewed not simply as a delivery system but as mediating a complex underlying structure of values, motives, and biases" (p. 280). According to Lantolf (1994), mediation is "the introduction of an auxiliary device into an activity that then links humans to the world of objects or to the world of mental behavior" (p. 418). Our view of the computer is as a mediating tool for teaching and learning CL. The computer is a *physical tool* that allows students to change or influence the external world (Vygotsky, 1978), for example, sending an e-mail to a key pal. In addition, the computer is a *symbolic tool* that allows students to mediate mental activity (Vygotsky, 1978), for example, using the response of the computer to self-assess the execution of key commands.

This view of the computer as a mediating tool necessitates that teachers develop a better understanding of its role in the SL classroom. This need for understanding begs the question: What should teachers consider when teaching computer literacy within a SL context? From a sociocultural perspective, one must consider the participants, teacher and students, because they have active roles in the co-construction of knowledge within the context. Also, one must consider the computer (i.e., technology) because of its role as a physical and a symbolic tool.

Participants and technology are perhaps the most evident considerations. We suggest, however, that teachers also must consider language and content issues. Language is the primary symbolic tool (Vygotsky, 1978; Wertsch, 1991) for instruction and an integral part of word processing, e-mail, presentation software, and the WWW. Thus, teachers must examine the language component to understand the context dynamics and make appropriate adjustments in their teaching. The content of material is a traditional concern for teachers, and must continue to be so, especially as teachers make choices regarding what computer-based content to include in their lessons.

In the following section, we first discuss the considerations regarding context participants, focusing on the teacher and students, but also including the computer. Next, we

discuss the context dynamics of technology, language, and content. Included in the discussions are suggestions for teachers. Third, we illustrate our points by working through an example. Finally, we offer a conclusion.

Context Participants

First, the context participants must be identified. The obvious participants are the teacher and the students. Computers, including hardware and software, also are participants. Recall that from a sociocultural perspective, the computer is a tool in the SL learning context. User knowledge and skill are required for effective use, but the computer itself can participate in building that knowledge and skill. SL teachers, therefore, must consider the computer as a participant during CL lessons.

Second, the interaction between participants must be considered. Teacher-student interaction is a fundamental interaction pattern. In addition, student-student and student-computer interaction must be taken into account. Interaction between student and computer facilitates CL development. As students interact with the computer, the responses of the computer shape their knowledge. Each task contributes to building a schema for what can and cannot be accomplished using this tool[3]. Student-student interaction also facilitates learning. Knowledge can be exchanged and shared. An expert student can mentor a less-experienced student, or two novices can work together to build skills and confidence. In sum, the context of CL in SL classrooms encompasses the participants, teacher, students, and computers, and their interactions.

Context Dynamics: TLC

With context participants described, we now focus on the three components mentioned previously: technology, language, and content. For each component, we will identify considerations and suggestions. The bases for these considerations and suggestions are the experiences of the authors in teaching computer literacy skills to adult ESL learners.

Technology

When teaching computer literacy skills to ESL learners, problems concerning technology are often in the forefront of the teachers' minds. Beller-Kenner (1999) describes her experience teaching computer skills to SL students. Her description serves as an example of typical problems and frustrations:

> "When training language learners to use computers, I have found that about 25% of the students become lost, for some reason or other, after Step 1, which is to start up the machine. As the lesson progresses, another 25% become lost because they haven't heard, they haven't understood, they have done something wrong, the hardware or software has not been set up properly (or was changed), equipment has been moved around or removed, equipment is defective, or they have experienced any number of unforeseen problems. ... This seems to increase exponentially with each step. (Beller-Kenner, 1999, p. 363)"

Beller-Kenner points out that focusing computer instruction on the skills is necessary to complete the task at hand, and classroom management includes managing the technology. We suggest that four factors are of specific importance: (a) computer resources; (b) CL knowledge of the participants, (c) task microskills and macroskills, and (d) visual focus.

First, identify the facilities available to the SL staff and students. This includes the location of the hardware (i.e., computer labs, classrooms), number of computers, working condition of computers, available software, speed of internet connections, etc. Teachers also should know what technical support, if any is available during instruction.

Second, assess the knowledge of the participants. The teacher and the student participants bring technological histories to the classroom. Recognising the role of history is a consideration within Vygotskian theory. The participants' past experiences and current expectations will impact the lesson. Also, students may have schema for SL learning, but not for CL learning. Teacher and students will range along a continuum from novice to expert. Basic factors to consider are:

- What computer skills do the teacher and students have?
- What experiences with and attitudes towards CL do the teacher and students have?

Teachers must accurately self-assess their own CL in light of the objectives of their institutions. An accurate assessment of the students' CL also is necessary. Student self-assessment questionnaires or surveys can provide the information. Survey items should ask students about specific operations (e.g., I can cut and paste text) rather than general operations (e.g., I know how to use a word processing program). This specificity is necessary because students' perceptions of their skills may not be based on the same criteria as the teachers'. For example, students whose knowledge of typing text is limited to typing in text boxes on the WWW may treat a word processing program in a similar manner by putting hard returns at the end of every line in order to double-space their document.

Third, analyse the microskills and macroskills needed to complete the CL/SL tasks. When designing macrolevel web-based reading tasks, for example, teachers may be concerned with students' reading of text on the screen. They know students may interact differently with words on a screen and words on a printed page. However, teachers may not be aware of the microskills needed to complete the task. Students must know how to open the software that allows access to the WWW, find the appropriate reading (e.g., typing in the URL or using the mouse to click on a link), and use the scroll bar to read longer text. If students are unable to complete the microlevel skills, they will not be able to complete the macrolevel skills. The teacher must understand the computer task as a whole (macrolevel) and identify its constituent elements (microlevel) so that she can teach the technology necessary for the language task.

Fourth, control the visual focus. The addition of the computer screen

to the classroom, and in some cases an overhead screen to show the teacher's desktop adds to the choices students must make about their visual focus. If a handout accompanies the task, the students must choose between the handout, the teacher, the student's computer screen, and the overhead screen. The teacher must explicitly direct the students where to focus visually. This is particularly important with lower level students whose listening and reading skills are less developed. One suggestion is for the teacher to model how to operate software as the students follow on the overhead screen or their own screens. This modelling supported by verbal instruction provides the necessary schema for students before they try the operation on their own or review an accompanying handout.

Technology, the first component of the context dynamics, involves more than screens and keyboards. Technology in SL contexts includes identifying computer resources, assessing CL knowledge of the participants, analysing CL microskills and macroskills, and controlling students' visual focus.

Language

When students learn a CL skill, the new language demands of instruction can be significant. Just as students have difficulty dividing their visual attention, students have difficulty simultaneously attending to the language of the instructor, the language of the computer, and the language skills required to accomplish the task.

Special emphasis must be given to the language students' need to understand the teacher's instructional language and computer's interactional language. Two part verbs like "hold down," as in "hold down the mouse button," as well as new classroom instructions and technical vocabulary must be learned. Students need to know what it means, for example, to scroll down, highlight the text, move the cursor, etc. Also, students need to understand the dialogue boxes, the help messages, the menus, etc. Students may be familiar with the mechanics of computer applications in their native language, but have no knowledge of the terms in English. Learning language while focusing on the task demands is difficult unless teachers explicitly teach the language associated with the task. To make language input more manageable for students, teachers can break down tasks into microsteps, limiting the language load in each step. For example, when students are learning a word processing program, we break the process into microsteps and incorporate vocabulary instruction. The first step may be reorientation to turning on a computer lab computer, logging onto the server, and finding the application. While modelling steps, the teacher introduces or reinforces the vocabulary of the procedures. Regardless of the individual student's language proficiency level, breaking down each task and considering the language necessary is important for students to understand instruction and build CL skills.

The SL teaching point must be considered in relation to the CL aspect of the task. For example, when the notion of peer editing is a new concept, attention must be given to teaching students how to peer edit. If the teacher has chosen to teach this language skill while students are learning features of a collaborative writing program, students may leave the classroom with only partial understanding of both tasks. We suggest this partial understanding is due in part to the students' dividing their attention between the new language skill and the new CL skill.

Language, the second component of the context dynamics, involves the language of instruction, the language of technology, and the language focus of the task. SL teachers, therefore, must identify a range of requisite language that extends beyond the customary language learning objective.

Content

The third component of computer literacy is content. By content we mean the information contained within the software or accessible by using the software. Content concerns are most obvious when working on tasks that include the WWW, but content can also be an issue in e-mail messages and presentation software slides. The issues raised here will be familiar to teachers. Three areas of particular interest are: (a) the appropriateness of the content for the task, (b) the appropriateness of the content for the students and the classroom, and (c) the content background knowledge of the students.

First, teachers are well aware that the content of reading and listening texts must be relevant to the task. The same holds true for content accessible through computer software. Teachers must treat computer-based content with the same discerning eye they use with other materials.

With regard to web-based texts, the quality of the text is directly related to the issue of appropriateness for language learning tasks. For example, the University of Pittsburgh Library System (2001) suggests how to evaluate web information. Their suggestions include recognising if a text is a primary or secondary source, evaluating the breadth and depth of the material and the point of view of the author, identifying the intended audience, and recognising if the material is "popular" or "scholarly." Teachers need to evaluate the quality of web texts and must in turn teach their students the same skill.

Appropriateness for the students and the classroom is another content issue. Again, teachers can use their knowledge of selecting material from non-computer sources. The students' ages, cultural backgrounds, genders, personal experiences, professions, educational backgrounds, and the classroom environment are factors that influence the teacher's selection of texts. Again, web-based texts are of special concern. If the teacher has pre-selected sites and uses an off-line browser, she can control what texts the students access. If the students are free to search, the students have opportunities to go beyond the intended pages into areas that the teacher may not consider appropriate for the classroom. Teachers, therefore, must decide in advance whether to allow controlled or open

General Description of Task	Objectives: a) To learn how web sites are organised; b) To apply evaluative criteria to informational sources on the WWW. In the computer lab, the teacher (T) introduces relevant concepts and vocabulary with visual support. Unlike text on the printed page, text on a web page is embedded with many more organisational cues and distractions. Students (Ss) work together to scan for relevant information and share experiential knowledge. Ss then evaluate web pages by answering questions on a handout prepared by the teacher (see Appendix)[4] Each group prepares to report on the results at a later class discussion.
Context Participants and Interaction	Development of knowledge about critical reading and navigating the web sites and using a web browser is the product of the T's instruction and the execution of the task in pairs through student-teacher, student-computer, and student-student interactions.
Technology: Resources	Networked computers in a computer lab with WWW access and an on-line browser.
Technology: Knowledge of the Participants	T knows the facility and the software. T also knows that many of the students are uncertain about how to find the source and/or author of a web page. Ss know how to turn on the ocmputers, find the browser and access the WWW in the computer lab. Ss know how to use links on a web page to move around the WWW.
Technology: Macro and Micro skills	Macro skills: • Accessing the WWW; • Using a browser effectively; • Moving around a web site. Micro skills (examples): • Typing a URL accurately in the location box to locate a web page; • Understanding the function of a web site home page; • Using the scroll bar to move up and down a web page; • Using buttons on a tool bar to go back and forward in a web site; • Recognising which links are web site internal and which are web site external.
Technology: Visual Focus	Pre-reading focus: *Projection screen:* An overhead projection system limits the visual focus. It models the task and introduces vocabulary and organisational concepts. *Task focus:* Students' computer screen
Language: Instruction	Necessary vocabulary from previous lessons is kept consistent, e.g. tool bar, scroll down, right click, etc.
Language: Technology	The relevant new vocabulary is introduced during pre-reading.
Language: SL Skills	• Using criteria for evaluation of informational resources • Skimming for main ideas to determine relevancy to the topic • Scanning for particular information, e.g. the author of the material, evidence that the material is timely, etc.
Content: Text	Three individual web pages, selected by T. Criteria for selection: • Relevent to reading text unit topic (environment); • Relatively current; • Range of accessibility to the authorship of the material; • Range of information available to assess reliability. The questions of authorship and reliability are the most problematic ones for these particular students as they present the greatest challenge in the exercise.
Content: Appropriateness	Appropriate for academic setting. Appropriate language for high-intermediate learners. No internal or external links lead to content inappropriate for a culturally mixed class of adult learners.
Content: Student background knowledge	Applying a process of evaluation is the focus of the exercise. Evaluation criteria, e.g. relevancy, authorship, reliability, timeliness, bias, were established in previous classes. The environmental issues have all been addressed as part of the textbook unit.

access.

The third area regarding content is the students' content background knowledge. Teachers need to provide their students with necessary content background knowledge before the students encounter content on the computer. The added challenges of controlling technology and encountering new language in computer-based content make the need for background knowledge even greater. Students need to know what to expect from the content in order to be able to find and understand the relevant content on the screen. For example, before hearing a lecture on US immigration, a teacher may want students to investigate sites about Ellis Island. If students are not familiar with Ellis Island, however, the web-based pre-listening task will not achieve its purpose. Again, the pedagogical issue of preparing students for a task is applicable for computer-based content.

Content, the third component of the context dynamics, includes content of the computer-based text, content appropriateness, and student background knowledge. All three instructional components, content, language, and technology are integral to the planning and implementing of CL lessons in SL contexts. The teacher's assessment of the extent and interaction of these components enable her to adapt and develop techniques for teaching CL in SL contexts.

An Example

To illustrate how participants, technology, language and content interact in the context of building CL, consider the example of an intermediate ESL class working together to learn how to evaluate material on the WWW.

Conclusion

In conclusion, the introduction of the computer as a physical and symbolic tool to teach computer literacy changes the instructional context of the second language classroom. The rationale for attending to context and regarding the computer as a mediational tool finds its roots in sociocultural theory. This view of instructional contextual change mediated in part by technology necessitates that SL teachers examine the issue of teaching computer literacy as a whole and examine its constituent elements. This article suggests that the elements to consider include traditional and novel contextual components. The traditional elements include participants, material content and attention to language, while the novel elements include technology and the interaction of technology with participants, content, and language.

Appendix

Reading — Computer skill: Evaluating Web Sources

Fall 2000 — Reading skills: Critical Reading

Today we will evaluate two/three articles that are located on the WWW. These articles were found by doing a search using the key words 'environment issues'. Should a student use these articles for an academic assignment? Work with your group and evaluate each site. Scan each **web page** and **web site** and answer the questions below.

Article #1 - http://www.worldbook.com/fun/wbla/earth/html/ed14.htm

1. What is the name of the article on this **web page**?
2. Can you find an author? If so, write the author's name.
3. What are the author's credentials?
4. Who put up the **web site**? (Explore the site.)
5. Is the information in the article timely? How do you know? (Look for dates.)
6. Does the author or source show bias? (Consider why the article was written or for whom the article was written.)

Article #2 - http://www.geocities.com/RainForest/1361/climate.html

(Questions as for Article #1)

Article #3 - http://www.overpopulation.com/introduction_essay/index.html

(Questions as for Article #1)

Notes

1. This paper is based on a presentation given at the March 1998 TESOL Conference in Seattle, WA, USA.
2. This definition reflects the computer literacy objectives of The English Language Institute (ELI) in the Department of Linguistics, University of Pittsburgh. Computer literacy is incorporated into the language skills curricula at the ELI.
3. However, the teacher must design tasks that consider the mediational role of the computer and facilitate the development of their students' s computer skills rather than relying on the computer to do the work unguided.
4. Teachers should design tasks to have enough content so that the novice students can accomplish the task in the time allotted, and the more proficient students can continue with some optional work.

References

Beller-Kenner, S. (1999). CALL issues: Introducing students to computers. *CALL Environments: Research, practice, critical issues*, 362-385.

Burnett, J. (1999). Classroom- management-classroom-survival: One teacher's story of constructing practice in a computer-equipped foreign language classroom. *Foreign Language Annals*, 32 (3), 279-294.

Lantolf, J. (1994). Sociocultural theory and second language learning: Introduction to the special issue. *The Modern language Journal*, 78, 418-420.

Reagan, T. (1999). Constructivist epistemology and second/foreign language pedagogy. *Foreign Language Annals*, 32 (4), 413-425.

University of Pittsburgh Library System (2001). Evaluating information. Retrieved 29 March 2001 from the WWW at http://www.library.pitt.edu/research/eval

Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Cambridge, MA: Harvard University Press.

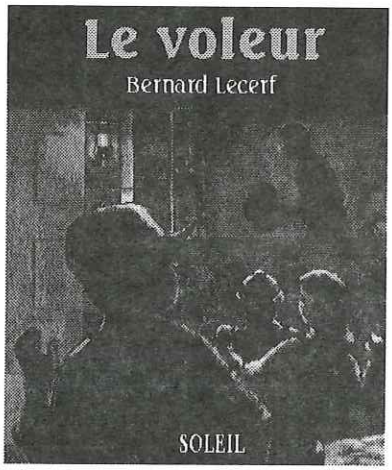
Vygotsky, L. S (1986). *Thought and language*. Cambridge, MA: MIT Press.

Wertsch, J. (1991). *Voices of the mind*. Cambridge, MA: Harvard University.

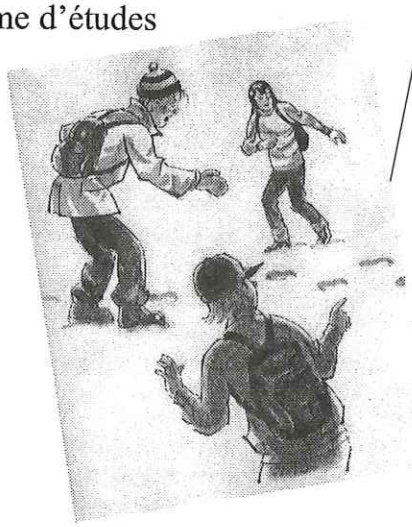
Dawn E. McCormick, Ph. D., and Susanne McLaughlin, M.A. are faculty administrators at the English Language Institute in the Department of Linguistics at the University of Pittsburgh. Their responsibilities include ESL teaching, teacher supervision, curriculum.

Vient de paraître...

Répondant aux besoins des enseignant(e)s
et aux exigences du programme d'études



BK-120



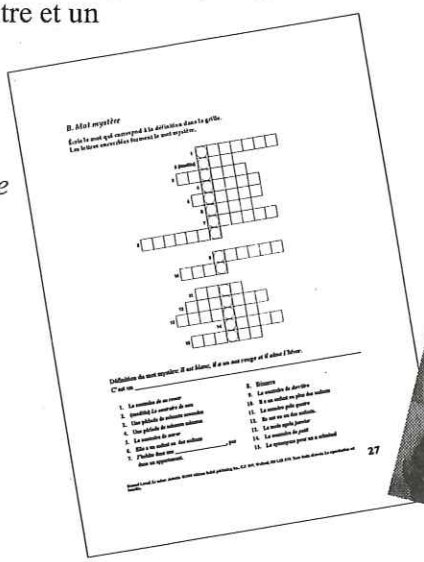
ISBN 0-921831-70-6
Pp. 28 • Trim size: 7" x 8½"
Order Number: BK-120

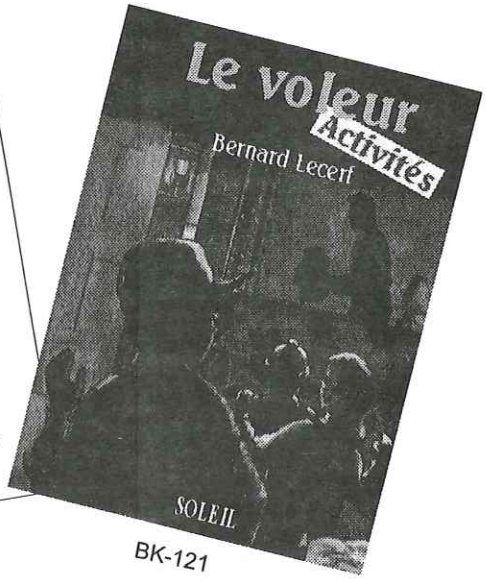
Le voleur

L'aventure de Catherine, Julien et Jean-Pierre...
Des traces de pas dans la neige... Un voleur dans la maison... Madame Dallaire aide les enfants...
L'amie du voleur... Jean-Pierre panique...
Mystère!... Danger!... Suspense!...

Le *livre de l'élève* comprend dix illustrations (une par chapitre), un vocabulaire illustré pour chaque chapitre et un lexique français-anglais à la fin du livre.

Le *cahier d'activités* accompagne le *livre de l'élève.* Les activités, nombreuses, variées et amusantes, stimulent l'esprit ludique des apprenants.





BK-121

ISBN 0-921831-72-2
Pp. 44 • Trim size: 8½" x 11"
Order Number: BK-121

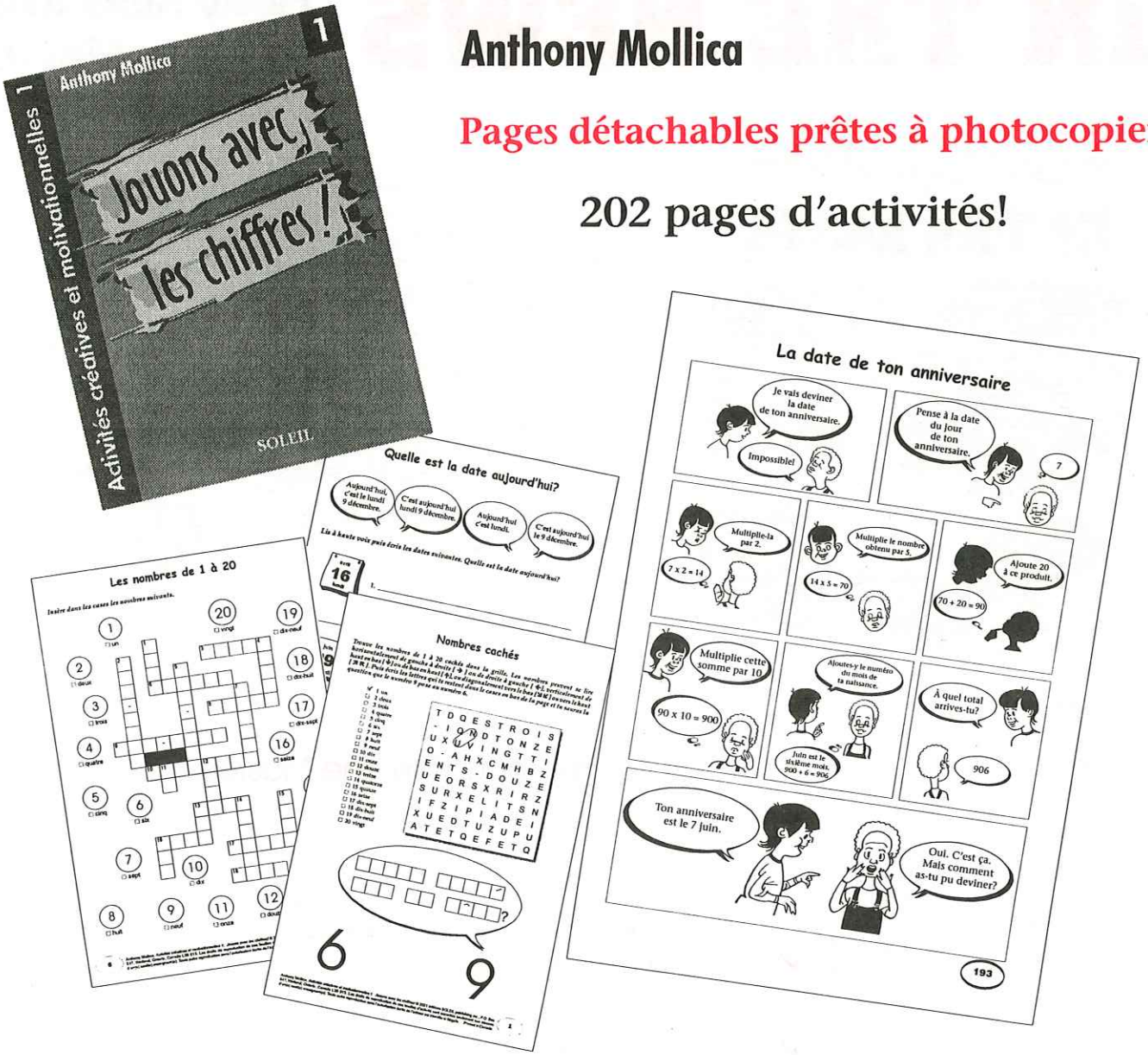
éditions SOLEIL publishing inc.
Canada: P.O. Box 847 • Welland, Ontario L3B 5Y5 • Tel. / Fax: (905) 788-2674
USA: P.O. Box 890 • Lewiston, NY 14092-0890 • Tel. / Fax: (905) 788-2674
Fax Order Desk: 1-800-261-0833
soleil@iaw.on.ca www.soleilpublishing.com

Activités créatives et motivationnelles

Anthony Mollica

Pages détachables prêtes à photocopier

202 pages d'activités!



Comme H. H. Stern l'affirmait justement, "Ces dernières années, en partie à la suite de recherches effectuées sur les mécanismes d'apprentissage des langues secondes et en partie à cause du succès des programmes d'immersion, notre conception des processus d'acquisition d'une langue seconde a évolué. Il s'avère notamment qu'il est impossible de se contenter d'exercices systématiques pour enseigner une langue, et que la meilleure méthode d'apprentissage est celle de "faire autre chose" tout en utilisant la langue." *Jouons avec les chiffres* est une série d'activités de casse-tête mathématiques que l'apprenant pourra résoudre tout seul ou en groupe. Ces activivités impliquent la participation des quatre compétences linguistiques tout en accentuant l'élément ludique dans l'apprentissage.

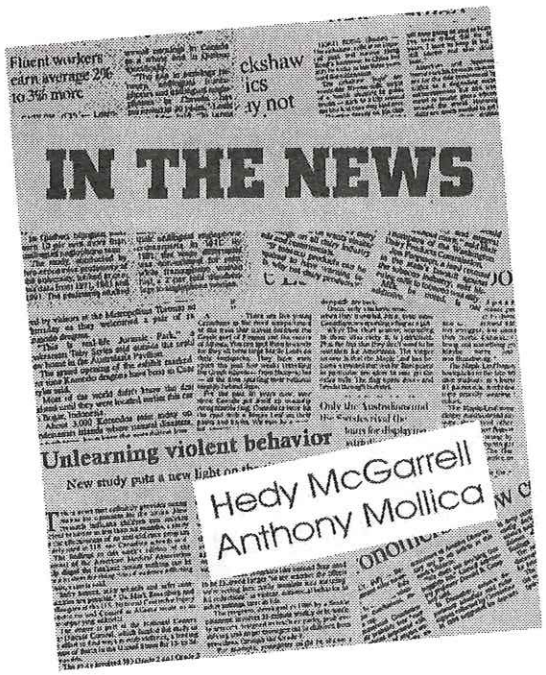
ISBN 0-921831-78-1 **Order Number: BK-131** **Printed in Canada**

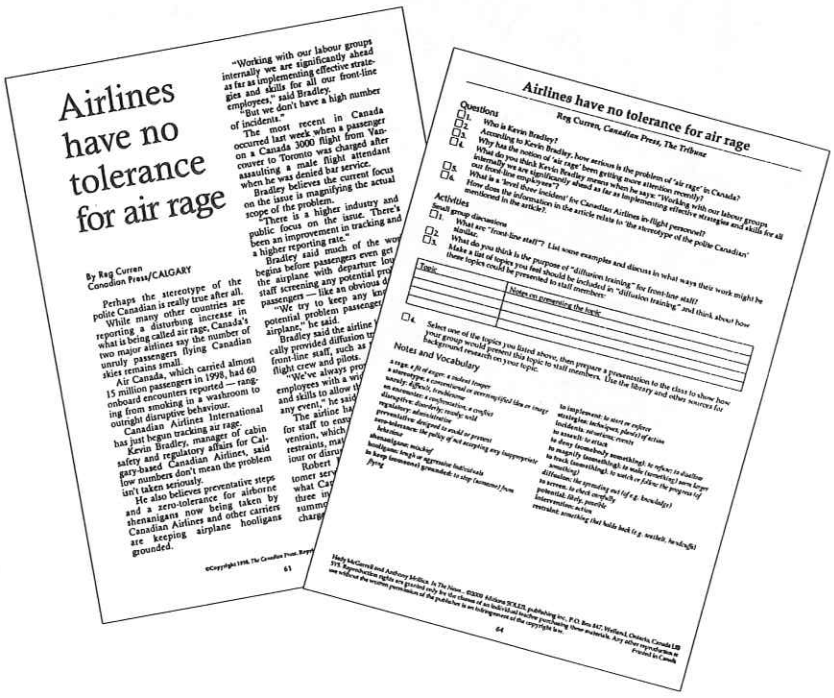
éditions SOLEIL publishing inc.

Canada: P.O. Box 847 • Welland, Ontario L3B 5Y5 • Tel. / Fax: (905) 788-2674
USA: P.O. Box 890 • Lewiston, NY 14092-0890 • Tel. / Fax: (905) 788-2674
Fax Order Desk: 1-800-261-0833
soleil@iaw.on.ca www.soleilpublishing.com

IN THE NEWS

Hedy McGarrell
Anthony Mollica





Hedy McGarrell is an Associate Professor in the Department of Applied Language Studies, Faculty of Humanities, and in the Graduate and Undergraduate Department, Faculty of Education, Brock University. Her teaching, research and publications focus on first and second language teaching and learning.

Anthony Mollica is Professor of Education, Faculty of Education, Brock University and Full Professor (status only) at the University of Toronto, Mississauga. He has published widely in the field of second-language pedagogy.

Reproducible Line Masters

- ✔ A collection of articles from different news sources, selected for their potential interest to a broad range of adolescent and adult learners in ESL and EFL settings.
- ✔ Each article begins with a reading and offers questions, group and individual activities, and a glossary for selected vocabulary items.
- ✔ The subject matter ranges from serious issues that touch the consciences of people in this culture and around the world to more amusing subjects that reveal insights into the qualities and activities of human beings.
- ✔ The articles are suitable for a variety of levels from beginner to advanced; the complexity of the students' answers and the depth of discussion will vary according to their level and background knowledge.
- ✔ The variety of questions, at different levels of complexity, makes it ideal for multi-level groups: instructors can assign less complex questions to weaker students and challenge more advanced students with more appropriate questions.

ISBN 0-921831-67-6 Order Number: BK-118 Printed in Canada

éditions SOLEIL publishing inc.

Canada: P.O. Box 847 • Welland, Ontario L3B 5Y5 • Tel. / Fax: (905) 788-2674
USA: P.O. Box 890 • Lewiston, NY 14092-0890 • Tel. / Fax: (905) 788-2674
Fax Order Desk: 1-800-261-0833
soleil@iaw.on.ca www.soleilpublishing.com