FACULTY INVOLVEMENT IN CALL: CHALLENGE OR THREAT?

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As the token non-tekkie at IALL — Look Ma, no hands-on! — I was especially pleased to be asked to speak on the topic of "Faculty Involvement." At first glance, it might not seem to be a very controversial or difficult topic: a great many of us now engaged in CALL are language faculty, and we hope that other faculty will get involved to whatever extent they want to, and we're sure that many of them will do so when they-all come to understand the joys and benefits that we-all know come with IALL. But it's not that straightforward. When we talk to colleagues who are not yet persuaded we tend to play up the positive aspects of the challenge and play down the threat, but it is too simple to see these as two sides of the same coin. Both the challenge and the threat are more complicated than they seem on the surface.

Although I'll be talking to a certain extent from the perspective of language faculty in the conventional administrative framework of the American education system, I'm not principally concerned with issues of governance as they play themselves out specifically in this country. We should be aware that the success of CALL, and indeed the success of the whole endeavor of language teaching, is an international challenge. The traditions of the discipline of language teaching, the cultural ethos of the classroom, students' expectations and motivation, the place of teachers in society, the autonomy of the teacher and of local school systems — all of these vary widely from one country to another, but the intellectual issues that underlie our interest in CALL are more general, and we will all be stronger if we are joined by that recognition.

Somehow I seem to have developed a reputation for telling fairy stories — some of you have heard the one about Ed Tech and his extended family — so I've brought another one today. This one represents the fears many foreign language teachers have about what will be imposed upon them by technology.

Once upon a time there was an innocent hardworking language teacher who lived with her mother, the department chair, in a cottage on the edge of a big forest that had a lot of other departmental cottages in it too. One day the department chair called the language teacher and told her to go across campus — I mean through the forest — to the lodging of her grandmother, the traditional helpful supportive academically oriented administrator, who was seriously ailing, suffering from the freeze that had drastically slowed growth in the forest. "Take your grandmother this basket full of COOKIES (communicatively oriented optimally knowledgeable internationally erudite students)," she told the language teacher, "and be sure to tell her how popular

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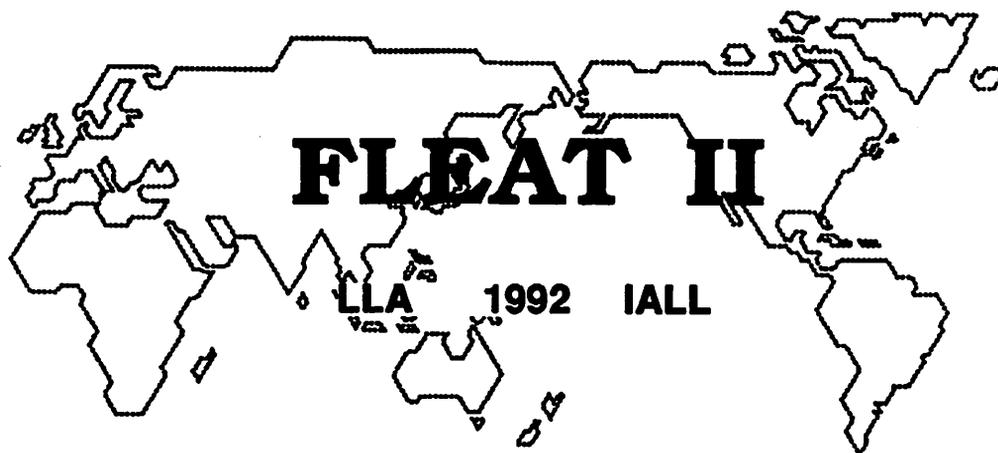
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words, the CALL effort was led to a considerable extent by individuals who were both developers and consumers of their materials and who were often isolated from their colleagues—sometimes becoming still more isolated as they became more interested in CALL.

Now, however, we are moving into a new era. CALL is no longer thought of as the province of only a few eccentrics; in fact, in some places it seems to be taking on the status of a bandwagon — and that brings danger as well as excitement. As my fable suggests, administrators are increasingly the ones taking the initiative to establish technology sites for language learning, sometimes even when many or most of the language teachers at an institution don't want any part of it, and this initiative on their part is often based on serious misunderstanding about how CALL can and should be implemented. Often, alas, they are enthusiastic simply because they unrealistically believe that on the basis of a one-time investment in a few truckloads of hardware they can without any further cost realize major savings in the cost of language teaching — for example, by greatly increasing class size. Part of our challenge, therefore, is to make a strong and well-founded case that will help us resist such misguided efforts.

Seen more positively, our challenge is to see to it that technology can begin to play the role it is capable of in addressing some of the most pressing problems in language learning. We are all aware of the growing demand for language classes in the current trend of campus-wide internationalization, of the increasing shortage of language teachers as we reap the consequences of the elimination of language requirements and language programs in the seventies, of the demand for availability of the less commonly taught languages, of the demand for greater communicative proficiency in the students who take languages. If technology

is to assume an appropriate role in addressing these demands, it has to be recognized as valid by a much larger segment of the profession.

But it's not only for the good of the field that we should establish the validity of CALL; it's in our own self-interest as well. Even now many faculty members are warned against involving themselves with technology until after they have gotten tenure for conventional reasons because of the general perception that there is no intellectual substance to it, or that it is just an appendage to language teaching which itself doesn't get one tenure in "research-oriented" departments. If we want our efforts to be rewarded we must change these perceptions and establish the recognition of CALL as an integral part of the discipline.

Success in that effort requires first of all the participation of a larger segment of the language teaching profession. That means that we have to be able to frame the benefits of technology in terms that can be understood and accepted by those who have no particular interest in developing materials themselves, but only in making use of CALL to the extent that they can believe it will serve their classes, their teaching styles, their students, their purposes—all without causing them much work or anxiety. The corollary is that the use of technology will have to be genuinely integrated into more of the language curriculum than is now usual.

To address this corollary first, the main problem is that it involves us in a sort of Catch-22 situation. In most institutions there are not yet anywhere near enough workstations available to language learners for us to require all the students in a language program to use technology-based materials as a regular integrated part of their coursework. Therefore CALL materials tend to be developed for more or less peripheral purposes — for one section of students, for one unit of the work, or for optional use, e.g., enrichment, remediation, extra credit. But

as long as technology is used only in this add-on way we can't evaluate how or how much it could contribute if it were really integrated. And as long as we can't do that kind of evaluation, administrators (at least those who aren't gung-ho for the wrong reasons) are reluctant to invest the money needed to make a genuine integration possible. That investment, as we all know, requires money not only for the hardware but even more important for the support structure — staffing, ongoing software acquisition, training and release time for teachers to author and test software and to revise curricula, maintenance and upgrading, etc. The only way out of this Catch-22 is to justify this large and complex investment on the basis of arguments other than that of alleged cost-cutting — arguments resting on well thought out plans to make technology important to the whole enterprise, not just to limited bits of it. That in turn will depend on a far larger proportion of teachers at an institution recognizing the desirability of using technology across the language curriculum.

So we're back to the need to involve more faculty, and thus the need to overcome the sense of threat. We often hear that teachers are afraid in the first instance of the technology itself, and that is in some cases probably true. (For that matter, there are lots of jokes about most of us being unable to program a VCR.) Plenty of people including teachers resent our increasing dependence on gadgets and machinery, and computers are still somewhat more daunting than cassette players or VCRs. But I don't think this is a major factor. People who have even slight interest can bring themselves to ask someone (often their kids) how to turn the thing on and how to move through a piece of software. We also hear that teachers are afraid that computers will take over their jobs, that a move to use technology is a move to replace teachers. Unfortunately the push towards technology by big bad cost-cutting administrators is often predicated on some version of that

assumption, so teachers can hardly be blamed for this fear. Nonetheless, the use of technology in many subject areas is by now widespread enough so that there are plenty of voices insisting that computer-assisted instruction does not in fact replace teachers, and most administrators do actually understand this. Again, I think this sense of threat is overrated as a factor. Many teachers feel a third kind of anxiety about being made to feel and/or look like novices and incompetents; teachers in all disciplines get used to thinking of themselves as experts in their own domain, in the classrooms they've been trained to control. Precisely because they know that many of their students are far more at ease with computers than they are, they hesitate to get involved with something that will cause a loss of face. And a fourth fear is that if they get involved at all they will be setting foot on a steep and slippery slope and will be unable to prevent getting trapped in materials development projects — even, oh horrors, in programming — that will take far too much time and effort than they can afford. We've all heard the solemn warnings about how it takes forty or maybe a hundred hours of authoring to create one hour of lesson material, and about how people get so committed that their marriages break up.

But these anxieties can be addressed and greatly reduced by rational discussion and by an adequate support structure. Teacher training workshops can reduce machine anxiety and make expectations more realistic; good authoring systems and well planned teamwork can dramatically reduce the time costs of materials production, and better materials are becoming commercially available.

Much more serious, and much more difficult to address honestly, is teachers' fear not of the technology itself but of the changes that technology use will impose on their teaching — changes in their curricula, changes in their whole relationship with students and with the subject matter of

language they've been trained to understand from one perspective. Of course technology is not the only threat to these traditional relationships; some teachers feel that pressures to adopt a more communicatively oriented and student-centered approach to teaching also force them to relinquish their authority, expertise, and control over the classroom. In neither case, I want to emphasize, is this an unreasonable anxiety, nor does it mark a teacher as regressive or unenlightened or inadequate. Teachers who are trained and experienced in one approach or method can't in all fairness be asked to switch in midcareer to a quite different one without any re-training or help just because the powers-that-be decide that newer trends sound glamorous. These fears can't be dissolved by reassurance and diplomacy.

I'd like to suggest that the underlying reason for all these different kinds of anxieties about technology is that in fact we know very little about how classroom second language learning takes place inside the minds of individual learners. Our approaches to language teaching over the years have not been based on a well-worked-out understanding of language learning, but have developed out of the tradition of teaching Latin as the standard language, the required second language, of Europe in the Middle Ages. With all the variations and swings of the pendulum so well documented in Twenty-five Centuries of Language Teaching, the basic ideas of what it is involved in teaching language, even of what language is, have not changed much in 500 years. It's only natural that when we're involved in an activity that isn't well understood, but where there is one widely accepted way of going about it, security lies in keeping to the recognized path. If in contrast we know exactly how something works we can go about it from a number of different perspectives or approaches, because we know what we're supposed to come out with — we understand the relationship between what we do and what the result is. But in language learning we don't

know how learners' language processing is actually changing, what really happens to make communication in a second language possible for some adult learners but not for others — and so we have no way of assessing what differences in language learning are really a result of what we as teachers do in class or how we organize learning materials. So I suggest that the unconscious attitude of many teachers towards technology is something like: "I don't really know how my teaching affects my students' learning, but as long as I'm doing it in the accepted tradition I can't be blamed; if I switch to something that looks radically different I may well be held accountable and I won't know how to justify the results if they're different — or even how to tell whether they're any better." And that's not an unreasonable stance.

All of us here believe that technology can have a significant positive effect on language learning, usually on the basis of our experience with our own classes. We're aware, though, that as yet the research basis for this belief is not unambiguous, and that many of the studies of "efficacy" are problematic for a variety of reasons, as Dunkel's collection of papers shows. If we're honest about it we have to admit that we do not yet have good research evidence about how technology affects the language learning process. So what right do we have to try to convince our colleagues that CALL is worth their time and trouble?

Some arguments can be made on the basis that technology can take over tasks that teachers don't particularly want to have to do themselves — gradebooks, routine grammar drill, using the computer to maintain files of quiz items, all fall into this category. Having the computer take over these tasks doesn't change anything about the general structure of the curriculum or the student-teacher relationship. There are also the technology-based enhancements of activities that most teachers easily accept as desirable — adding authentic culture and

authentic listening practice via interactive video is the prototype example. Giving students the opportunity to do this outside of class doesn't interfere either, especially when, as is all too often the case, the pedagogical uses made of these opportunities are entirely traditional. Unfortunately, the lack of threat is only too closely connected with the lack of value. There's very little benefit to doing grammar work on the computer, even touting the advantage of immediate feedback, when the exercises are as badly designed as those in workbooks usually are, and when the feedback that learners get is as superficial and poorly motivated by any understanding of language processing as is usually the case. There is only a little more benefit to doing listening comprehension with interactive video than doing it with the dreary audio tapes that come with most textbooks, if the exercises done on the basis of it consist of unscrambling words in sentences or answering the same kinds of multiple-choice questions, the ones that can be answered by hunting for a cue word or two without understanding what has been said. In other words, technology doesn't force us to change the way we teach at all — though that's hardly the basis we want to stress for encouraging its use. But most of the arguments we hear and repeat for using technology stress its ability to provide learning opportunities unlike those that can be offered any other way, and that's where the challenge — and thus also the threat — lies.

Now, the most common attempts to reduce the threat stress the politically correct axiom that pedagogy rather than technology must lead the way, that pedagogy provides the rationales which technology serves, not the other way around, that the teacher is always really in charge. Superficially that is all true and constitutes a reasonable reassurance. But — and this is a very delicate point — if we use only what is already "known" about language learning and what is already widely practised in language teaching as our basis for thinking

about what technology can do for us, some its most powerful and interesting uses will never come to our attention. Certainly, innovation must be motivated by principle and evaluated in practice; we don't want to encourage technology-based activities for which we really can't see any pedagogical motivation. But we must learn to navigate the perilous path between the tried-and-trivial on the one hand and the intuitive-but-untested on the other.

How do we do that? How do we validate our hunches that some of the "neat tricks" technology can do might lead us to think in new ways about language learning? The obvious answer is "research," but not only research evaluating the "efficacy" of technology in language teaching; as I said earlier, I think that we are only beginning to understand the limitations on the kinds of questions that efficacy research can intelligently address while most of the CALL materials we use are not designed from the outset to be fully integrated into a curriculum that makes principled connections between what learners do on the machine and what they do in class.

There are three other kinds of technology-based research agendae that we should be developing. One, urged earlier in Rose Chang's paper, is faculty members' "own" research, the work they do more or less independently of their teaching, which they expect to publish as a basis for promotion and tenure. We should explicitly encourage the use of wordprocessing, desk-top publishing, scanning, concordancing, etc. This is of course an ideal way to make technology use attractive to them and to reduce the sense of threat. But that kind of research is usually not directly tied to language teaching. A second kind of research agenda we could propound, then, focuses on pedagogical issues other than the evaluation of technology use. All kinds of data could be collected on how students perform on a range of computer-based language tasks, and these data could

be correlated with particular variables of pedagogical method. The third agenda that technology supports, and to my mind the most important, is that of research on classroom second language acquisition. From this perspective the focus is on the on-line language processing that learners engage in while they are interacting with some substantive technology-based language task. Whether that is reading, listening, writing, translating, doing grammar work, exploring hypertext or hypermedia, their moves through the material — the helps they access, the paths they choose, the responses they give to questions or stimuli — can all be tracked by the computer, and those tracking data can be analyzed for evidence of how they go about trying to produce and comprehend language. If we wish, such evidence can be correlated with data collected outside the task on other individual variables — age, level of learning, degree and kind of motivation, features of learning style or cognitive style, whatever seems useful to the researcher. (I have discussed the theoretical basis for this kind of research elsewhere.) We can develop a picture of how CALL materials are actually used in particular activities or tasks, by individual learners or types of learners — motivated and unmotivated, good and not-so-good language learners — when they are directed by an assignment or by the structure of the software or when they are turned loose to browse.

Designing and attaching software devices that can collect such tracking data and organize them efficiently for teacher analysis is the single most important developmental effort we can make to advance the cause of faculty involvement in CALL. Jim Pusack has heard me sound this theme so often that he has labeled it the Garrett Imperative, and although I blush at my own temerity in being imperative about anything I must accept the imputation. Tracking can provide evidence for research on efficacy, on pedagogy, and on second language acquisition processes, depending on what questions we want to ask and what aspects of learner performance we think are relevant. (We are particularly fortunate, in the field of language learning, that the study of how our subject is learned is the stuff not only of pedagogical research but also of basic, i.e., theoretically motivated, research, whereas in contrast research on how, for example, biology is learned is not really research on biology.) In fact, thinking of research from this point of view allows for an unprecedented kind of unified effort across the several components of the field of foreign language study. Our faculty colleagues in literature might see the possibility of technology-based research on how learners master concepts of stylistics or come to be aware of themes and images, or how they recognize and interpret poetical meter and scansion. Perhaps multimedia presentations of poetry would allow us to investigate how epic poetry was composed and learned and transmitted across generations. Teachers who focus on the descriptive or historical linguistics of a language or might see the usefulness of text analysis software in tracking how learners perceive the relationships of morphological or syntactic structures synchronically or diachronically, and language acquisition research from within Chomskyan theory might well track the use of particular morphemes or phonemes and the appearance of principles and parameter-setting even without artificial intelligence or the complexities of natural language processing.

Once we understand the potential for the use of technology in such directions, we can make a compelling case for the long-range benefits it could offer to faculty and their graduate students, and for the long-range impact it could have on the field as a whole. These are the kinds of data we need to motivate some much-needed changes in the way we think about language learning; when we have these data, then asking faculty to consider rethinking the way they teach is not demanding that they make a leap of faith. But we have to make the case.

I think most language faculty who have not yet become involved with technology at all, or only to the extent of using word-processors, would simply not understand the possibilities I've been suggesting. How can we expect them to? The training programs and methods courses through which current language teachers came to their careers have never included a component on the use of technology, and I venture to state that few if any of those educators now teaching methods courses have any such training themselves. How are we going to get the colleagues we long for, the intelligently interested trained motivated innovative people who will help us grow into a powerful constituency in our profession? We have to bring them through the ranks: the responsibility inevitably devolves upon us to develop some teaching modules on technology for use in methods courses. And in addition we have to work up a major publishing initiative that includes seriously researched and motivated discussions of curriculum revision and design in addition to discussions of technology itself. The EDUCOM / NCRIPTAL award competitions include a category for curriculum design and technology implementation, and that's exactly as it should be.

We need to spend a great deal more time and effort working out the relationships between the opportunities offered by technology and the goals and principles (and politics) of the discipline, and this is really a team effort. I suggest that we haven't yet engaged the help of people in a whole range of other fields where interesting work is being done on computer-assisted learning. Psychology, Bilingual Education, Reading Theory, for example, all include people whose work should be recognized as contributing to the intellectual paradigm within which our complex research agenda makes sense.

You have probably noticed that I've moved from discussing the challenge to other faculty to laying out a major challenge to us. Most of us are already overcommitted and overworked, and it's presumptuous of me to suggest that we take on the task of a major revision in the field's perspective on technology. But a true integration of teaching, theory, and technology is not just a matter of making those active in each area aware of or interested in the others: it requires that all of us understand that developing the full significance of each is essential to the intelligent exploration of the other two, that language learning, language teaching, SLA theory and research, and technology are equally essential components of the field, and that the whole of that field is more significant than any of the parts. Our challenge is to propose nothing less than a new disciplinary paradigm in which technology is recognized as making significant intellectual as well as pedagogical contributions. More power to us.

REFERENCES

Dunkel, P. (Ed.) 1991. Computer-Assisted Language Learning and Testing: Research Issues and Testing. New York: Newbury House.

Kelly, L. G. 1969. Twenty-five Centuries of Language Teaching. New York: Newbury House.