

An Academic Coordinator's Dream for the Language Lab : Ideals of Pedagogical/Technological Literacy in L2 Instructors

Diane Beelen Woody
York University, Toronto, Canada

Introduction

This paper, first presented at IALLT 2003, echoes the conference theme of "Connecting with a Diverse World," albeit with a slight twist. The aim is to present and explore a conceptual framework that will allow the language lab academic coordinator to connect with the diverse worlds of second language instructors who teach different languages, at multiple levels, using a wide variety of pedagogical materials to support different learning objectives, following an array of methods—often in eclectic fashion. Productive dialogue between L2 instructors and the lab director will benefit language learners, L2 instructors, the lab, and the overall goal of language learning within the educational institution. Working to achieve this vision of effective collaboration will require strategies and techniques to generate awareness of the attitudes, skills, and preferences of instructors in the areas of both pedagogy and technology. The goals of this paper are i) to propose frameworks for thinking about pedagogy and technology and their interface; ii) to provide checklists as concrete starting points for applying the frameworks; and iii) to stimulate critical thinking about the roles and expectations the academic coordinator and L2 instructors hold for themselves and for each other in their shared mission of supporting language learning within the academic setting.

The paper first sets forth what is meant by the role of academic coordinator; it then presents a framework to assist the lab director in developing awareness of the pedagogical situatedness of L2 instructors, followed by a framework to develop awareness of their technological literacy. The paper concludes by proposing a vision of the lab director, as an amalgam of pedagogical sounding board and technical consultant, endowed with strategic acumen to support faculty members effectively as they link

Roles of an Academic Coordinator

pedagogy and technology for language learning. For each part of this paper, numbered checklists in the Appendix provide concrete starting points for detailed and focused reflection. The checklists are also available online so that they can be downloaded and adapted by individual lab directors for use in their respective settings.¹

The term “academic coordinator” is used to highlight one particular role of the lab director, i.e., the academic function, as distinct from other functions, which may be more clearly administrative or managerial. In some institutions, there may be a separate individual who fills this academic role, often a faculty member who is given a course release. But in many other cases, a non-faculty lab director fills the role of liaison with the academic side of the institution as but one of many other functions. The point here is not to downplay the importance of the many other duties of a lab director: managerial, administrative, planning, and fiscal, to mention only a few. In fact, there is a surprising similarity between the number and variety of spheres of concern of a lab director, as set forth in the *IALLT Management Manual* (Lahaie 2003) and those of a language program director, as set forth in the *Handbook for Language Program Administrators* (Christison and Stoller 1997). The essential point is to ask how one can characterize the strictly *academic* activity of the director of a language-learning centre, in order to circumscribe what is encompassed in that role, and subsequently identify a conceptual framework and strategies for effective practice.

Broadly defined, *academic* matters are those that touch on teaching and learning, and the role of academic coordination would be those activities of the lab director that involve contact with language learners, with the policy-setting and decision-making structures of the institution, and most important, with L2 instructors.

In the area of support to language learners, the academic coordinator optimizes access to the resources of the centre and offers active support to L2 learners with their varied needs and interests (e.g., placement testing, user support to ensure adequate computer literacy and to complete specific projects, etc.). The example of the creation of a Web page for a language resource centre is an interesting example of a task that has a multilayered purpose. It is simultaneously an administrative task and also much more than that, because the Web page will do more than simply provide information to learners about the centre’s hours and collection of materials. In addition to offering guide-sheets to specific software and applications, the Web page acts also as a portal to on-line resources, among them study resources (course and publisher

Web pages, electronic workbooks, tutorials, dictionaries), media resources, cultural and historical links, and sites for virtual tourism. The selection of links for a Web page is thus an academic activity involving assessment of the potential usefulness of the links to language learners. Checklist 1A in the Appendix provides a concrete starting point for reflection on how one can actively support learners and also encourage them to develop greater savvy and sophistication in their use of technology for language learning.

Similarly, liaison with the institution at large falls within the purview of academic coordination because it allows one to participate in academic governance and policy-making. It may be difficult for lab directors, particularly if they are not tenure-track faculty members, to see themselves as particularly influential in this academic role. It is perhaps fair to say that the capacity of the academic director of a lab to participate as an equal partner will vary widely according to the individual's desire to do so, and according to perceptions of status, qualifications, and roles in a given institution. Nonetheless, an awareness of this dimension is crucial, because actively maintaining a list of contacts allows one to stay in the information loop and to be well positioned to have upgrades and renovations done smoothly as the need and opportunity arise. Another important aspect is the visibility factor inherent in committee work. Visibility is also enhanced by a Web page or newsletter, and regular appearances at department meetings. Perhaps the most valuable aspect of this liaison role is a heightened sense of emerging trends on campus and a greater awareness of additional resources available to support faculty as they learn to use course management programs or other software supported by the institution. Checklist 1B in the Appendix offers concrete starting points for reflection on the liaison role.

Yet while these academic coordination activities are vitally important, the relationship of a lab director with L2 instructors remains the single most promising sphere of mutual influence and collaboration. One's capacity to perform credibly in this key academic role will necessarily have a positive impact on the academic coordinator's ability to offer valuable support to students and to participate effectively in governance structures. The focus of this paper will thus be on academic coordination understood as those activities that bring a lab director into frequent communication with L2 instructors to discuss the teaching and learning of languages, and to make decisions with respect to the use of the language lab in the delivery of the various language programs within the institution. The academic coordinator is

denoted here systematically in the singular because in any given institution there will be only one such individual attempting to work effectively with a host of diverse instructors teaching many different languages. This reality serves to underscore the unique position of the academic coordinator.

Communication with L2 instructors often gets initiated over routine matters, such as requests for the installation of software or for the digitization of pedagogical materials, and bookings of lab space and other resources. However, true communication and productive dialogue will extend to the selection of pedagogical materials, consultations about CALL use and research and materials development, and discussions and debates about the curricular issues related to all of the above. On a general level then, academic coordination means responding to L2 instructors not only in the area of administrative details and technical support and training, but more importantly in the area of collaborative activity leading to the professional development and greater self-efficacy of both the L2 instructors and the academic coordinator. Checklist 1C in the Appendix offers a generic overview of the process of maintaining contact with language instructors as a group, and some suggestions for identifying key faculty members. The important goal of keeping open the channels of communication with all faculty members can be accomplished through a judicious use of email and requests for information re the use of the language lab in specific courses. However, to achieve effective collaboration with a more limited group of key instructors, the academic coordinator will need to initiate and sustain dialogue in the two specific areas of pedagogy and technology.

Maintaining Awareness of the Pedagogical Situatdness of L2 Instructors

With pedagogy, the academic coordinator is entering the traditional preserve of instructors, not as intruder or judge, but as a supportive partner in a larger shared endeavour, that of language learning in an academic setting. A critical starting point for dialogue is an awareness of the pedagogical situatedness of different instructors, i.e., their philosophy of second language teaching/acquisition and the classroom practices which they consider most effective. The dream is that the academic coordinator and L2 instructors will employ a common vocabulary and share contextual awareness so that instructors will be understood when they articulate learning objectives within their own particular brand of pedagogical eclecticism. Fortunately, L2 instructors are more articulate about pedagogy than is sometimes the case with instructors in other disciplines. The unfortunate part is that during routine conversations with the lab coordinator, instructors may well be pressed for time and focused exclusively on immediate requests, such as bookings or software

installation or troubleshooting of some kind, with the end result that the encounter may never reach the more interesting level of dialogue about pedagogy.

It is in the academic coordinator's interest to have strategies to engage L2 instructors on a deeper level while assisting them in finding solutions for immediate problems. Meeting routine requests and reacting to pressing matters, or even occasional crises, are not satisfying when they become all-consuming roles for the academic coordinator, nor do they contribute to the long term well-being of the lab director, the lab, the instructors, the students or the program of language study. The lab director needs to construe ongoing dialogue with instructors as a key function, in the category of functions and tasks called high-priority but not urgent. Unfortunately, human tendencies are to deal with urgent matters, whether they are high priority or not, and the end result is that the lab director may not get around to the academic liaison functions. The strategy proposed here is to link the high priority role of academic coordination to the instances of regular contact one has with instructors.

An academic coordinator will find it useful to have a set of open-ended, non-judgmental questions about preferences and approaches in the area of teaching and learning in general, and in the area of second-language pedagogy in particular. The theory is that an overview improves communication because L2 instructors and the lab coordinator will share vocabulary and a set of cognitive schemata. The latter are an organized set of facts, concepts, generalizations and experiences about teaching, and in particular language teaching, that will heighten the academic coordinator's ability to listen with understanding and to engage in fruitful discussion with L2 instructors. It is valuable to know the key words linked to different teaching styles and methods. The objective is not to assess the competence of L2 instructors, nor to pass judgment on their pedagogical choices, and it is crucially important to avoid giving any impression of doing so. As in second language pedagogy, one is deliberately trying to lower the "affective filter" (Krashen 1981) in order to foster a more positive ambiance for dialogue and risk-taking.

It is also useful to remember that in second language pedagogy there is much to be said for accepting and fostering eclecticism because it is a key to faculty enthusiasm and passion, which in turn is a key element of a successful class dynamic. But in the face of generalized eclecticism among numerous instructors teaching many different languages at different levels, it is doubly important

that the sole academic coordinator have a strategy for making connections through dialogue. This serves two purposes. First, in a concrete way, the academic coordinator has an opportunity to make sense of the constant decisions that need to be taken in the lab, often extremely rapidly, by connecting those decisions systematically to a way of thinking about learning languages, thereby becoming a reflective practitioner. Second, the overall framework for dialogue remains one of learning, broadly understood as moving from a position of not knowing something to eventually knowing it. Learning, by definition, thus evokes a state of constant change. A focus on learning thus construed can serve as a constant reminder to the academic coordinator that s/he constantly needs to learn and relearn where L2 instructors are situated individually and collectively at any given point in time. After all, instructors themselves learn from their teaching experiences, and they will most certainly continue to change their content emphasis, modify their pedagogical approach and adjust their attitude towards technology and the language lab. Establishing a framework focused on learning is best done in an open-ended, non-judgmental way. What follows are several strategies for doing so, with suggestions of sites and short articles that demonstrate thinking in open-ended ways about teaching and learning.

To open a dialogue about learning on a very general level, one useful construct is that of the "Seven Principles for Good Practice in Undergraduate Education," a set of guiding principles that provides a common vocabulary for a dialogue about teaching in general. The seven principles are that good pedagogical practice i) encourages student-faculty contact; ii) encourages cooperation among students; iii) encourages active learning; iv) gives prompt feedback; v) emphasizes time on task; vi) communicates high expectations; and vii) respects diverse talents and ways of learning. There are many written sources and Websites that discuss the principles, complete with suggested activities to implement them.²

For simplicity, the complete list of principles is often shortened to the principle of active learning, also called a learner-centered approach. The concept means that an instructor devotes as much time and effort to planning learning activities as to the preparation of lectures and other instructor-led presentations. With active learning, teaching itself is defined as the myriad activities that foster learning. With the example of language learning, the focus is on providing activities that strengthen reception skills and that generate an abundance of learner output for practice and

consolidation, within a framework of risk-taking and meaningful communication. The overall goal is to foster deep, long-term learning. A strategy for determining the importance of this for individual faculty members is to listen for the vocabulary of active learning which includes keywords such as "ongoing contact, student motivation, learning strategies, collaborative work, reflective self-assessment, student portfolios, prompt useful feedback, syllabus and textbook viewed as servants not masters, guidance on time management for assignments, high expectations, clear learning objectives, and diverse formats that respect different learning styles." Careful listening to how instructors talk about their courses will give a general idea of where they are situated on a continuum of active learning. A simple overall impression of low, mid or high on this continuum will suffice, along with an impression as to whether the instructor's use of active learning is changing on the continuum. It is also helpful to note any differences in their use of active learning in different courses, or at different levels. Checklist 2A in the Appendix offers a concrete starting point for developing this type of awareness. The reason for sensitivity to this principle is that a greater emphasis on active learning usually means more use of learning modules and other independent learning activities that prepare and enhance the classroom experience. It also often means greater attention to the needs and interests of learners and to the explicit development of learning and communication strategies. A very accessible and stimulating reading on the topic is the article "From Teaching to Learning : A New Paradigm for Undergraduate Education" (Barr and Tagg 1995).

A second example of a general model that will allow an academic coordinator to be sensitive to an instructor's pedagogical approach is the behaviourist / cognitive / constructivist categorization within an overall communicative approach. This strategy is useful for developing a clearer sense of the particular eclecticism of an instructor's foreign language pedagogy. Most instructors use a wide variety of teaching practices in order to help learners improve their proficiency in the target language. This involves the development of both greater fluency and greater accuracy in different contexts, in different areas of content, for different communicative purposes. In certain courses, at certain levels, aspects of behaviourist pedagogy remain extremely useful for practice. Practice allows students to internalize a stock of lexical and syntactic forms, which, once mastered and appropriated, contribute to greater accuracy, fluency and flexibility, thereby laying the basis for future growth in L2 proficiency. It can be very useful to simply ask where, in a given course, a given instructor

is placing emphasis on the consolidation or internalization of linguistic forms.

With most instructors, alongside behaviourist pedagogical tendencies, there will also be evidence of teaching practices based on a cognitive approach, i.e., techniques of analysis and schema. One appeal of the cognitive approach is that it links well with the critical intellectual approach that is characteristic of universities and colleges; it thus provides the basis of a rationale for the study of languages in post-secondary education. For example, it is argued that the study of foreign languages allows learners to move beyond the mental arbitrariness of monolingualism; they learn reasoning with nuance, mental discipline with flexibility, and alternate ways of viewing phenomena. It would be useful to listen for the key concepts of the cognitive approach: semantic fields for vocabulary acquisition, grammatical tools for the expression of concepts such as causality, consequence, comparison, analysis, synthesis and evaluation, and content related to culture, literature, society and history.

Additionally, in the present teaching environment, most instructors will exhibit some tendencies towards constructivism, which places a greater emphasis on collaborative learning and on the design of tasks that are meaningful for individual learners. The constructivist approach embeds a notion of active learning within it because its basic tenet is that knowledge cannot be passively received but must be constructed by the learner. Most instructors recognize the importance of meaningful learning tasks, but they differ widely in their reactions to collaborative learning, especially on how to structure it for efficiency as well as effectiveness, and how to have collaborative learning in a given course articulate with an entire program of study. It is useful to listen for keywords of collaborative learning, such as "authentic tasks, reflective inquiry, meaningful learning, collaboration, and knowledge construction." Another useful indicator of constructivism is the degree of openness or risk-taking the instructor encourages in learners, for example, the degree to which learners have input into the creation of assignments (topics, format, individual or team work, etc). It is unlikely that any given instructor will be a purist and an exclusive user of behaviourist, cognitive, or constructivist principles. Instead, there will be elements of each, some of which are firm pillars of an instructor's approach and some of which are present on a trial basis and may be abandoned, or alternatively, developed and strengthened to eventually become anchors. Checklist 2B provides a concrete starting point for developing awareness of the place of each set of principles in a given instructor's particular brand of eclecticism.

In the more narrowly circumscribed area of second language pedagogy, it is useful also to gain an impression of several other factors. For example, how attached is the instructor to the syllabus and to the sequencing presented in the pedagogical material in use? As well, what emphasis does the instructor place on reception and production skills in both oral and written modes, as well as on the cultural context for learning? What are the overall communicative and proficiency goals of the course? Do the ACTFL (or other) guidelines provide an overall structure for the development of proficiency? Do the instructors have a preference for authentic materials or for those adapted specifically for learners? Some of this information can be gleaned by scanning the course objectives, materials and assessment practices. Checklist 2C in the Appendix provides a summary of these questions.

Most L2 instructors and most L2 pedagogical materials in use incorporate some aspects of all of the different approaches already mentioned, in order to achieve particular learning objectives, to provide variety, and to sustain learner motivation. The point of trying to develop awareness of a given instructor's preferences, as stated above is not to try to label or judge the given instructor. Rather, it is to make a connection on a human and professional level, and to gain a general sense of where instructors are situated pedagogically, with the clear understanding that this is not a fixed and permanent state. What would be useful is for an academic coordinator to be able to identify the framework that seems to hold the greatest explanatory power of the practices of instructors in a given course or program of study. For example, is active learning the guiding principle, or a focus on accuracy of form, or cognitive development, or the development of collaborative, constructivist learning projects?

Having a general sense of where L2 instructors are situated pedagogically will also strengthen the academic coordinator's self-perception as an important supportive partner in the language-learning enterprise. The academic coordinator will gain a sense of the emphasis in particular courses and understand the direction of the program in particular languages. Taken collectively, the pedagogical preferences and approaches of all the instructors provide a snapshot of the current situation of the program of the study of languages. This snapshot is admittedly based on information gathered in a somewhat impressionistic manner. However, should more concrete data be required, the learning frameworks in checklist format can easily be recast in the form of a faculty survey which will yield the type of useful data

Developing Awareness of the Technological Literacy of L2 Instructors

needed to think synthetically and strategically, as well as creatively, about possible future directions of the language resource centre. A survey also acts as a useful stimulus to instructors who will be nudged to think about where they might like to develop greater expertise. For the academic coordinator, the capacity to participate in ongoing dialogue, to identify general patterns, recurring issues and evolving trends, and to synthesize information for future planning will contribute to one's own sense of self-efficacy.

Similarly, a framework for developing awareness of the technological literacy of L2 instructors will allow the academic coordinator and L2 instructors to move beyond routine encounters about bookings, digitization, and software glitches. To be able to offer focused support, guidance in the selection of materials, and consultations about CALL use and research, an academic coordinator will find it useful to have a non-judgmental way of understanding the technological literacy of instructors. Technological literacy is a broad term that encompasses more than technical savvy. In addition to technical skills, comfort levels and expertise, it includes their attitude towards technology-enhanced learning. It thus touches on their awareness of the potential ways that technology can support language learning and their appreciation of the transformative impact it has on the teaching/learning situation. As with pedagogical preferences, the point is not to label or judge faculty members, but rather to gain an impression of the technological literacy of instructors while fully recognizing that the situation is not fixed and permanent. Comfort levels with certain applications of technology will increase and usage will evolve as faculty members and students assess prior experiences to decide what is working successfully for them and what needs to be adjusted.

As with pedagogy, it is important that the academic coordinator have a strategy for establishing dialogue about the use of technology within a broad framework that helps make sense of overall patterns, recurring issues and emerging trends. One starting point would be to situate L2 instructors' preferences and experiences with technology for the purposes of communication, presentation of instructional material, and CALL use and research.

The broad category of technology for communication includes email and the use of distribution and discussion lists by L2 instructors. Checklist 3A provides an instrument for developing awareness of faculty comfort levels in this use of technology by listing particular applications and questions that might suggest

useful future workshops or other support activities. For example, the ubiquity of email does not mean that it is necessarily used optimally. It may be useful to ask in this instance about the level of appreciation or frustration instructors feel for this application. The academic coordinator will be in a position to identify recurring themes over the course of conversations with various instructors, and to plan focused, immediately applicable training in the survival strategies and timesavers of email use. It is usually a good idea to pay attention to instructors' reactions to email because it is one application that instructors use constantly; as an entry level skill, email use is an indicator of comfort levels and openness to technology. The advantage of remaining attuned to levels of technical expertise and comfort levels of L2 instructors is that the academic coordinator is extremely well positioned to assess what may be of interest and use to individuals given their learning paths and objectives. More important, the coordinator also gains a sense of where L2 instructors are headed collectively, and can plan infrastructure accordingly and also mobilize other resources within the institution, as needed, to provide additional training and support.

Similar queries can be made as to the preferences and comfort levels of faculty members with the use of presentation software for instruction. Checklist 3B offers a useful starting point for gaining awareness of the levels of comfort and expertise of instructors, for noting general patterns of use, and also for identifying instructors who would be good candidates for grants or other types of support from the institution. Finally, questions about language acquisition research or CALL use, production and research provide a sense of where instructors are devoting their research energies, individually and collectively (see Checklist 3C).

Admittedly, the distinctions among the uses of technology for communication, presentation of instructional material, and research are somewhat artificial. In reality, the uses often blur significantly as in the case of threaded discussions in email; they are at once communications in which students present ideas and opinions; they may serve instructional ends depending on how the instructor integrates them into a course; and they may also be a focus of research for an instructor interested in researching how students find voice and develop fluency and accuracy in the target language. Whenever the uses of technology blend in this fashion it usually means a productive convergence of teaching and research energies on a technological level where the instructor feels comfortable.

A second general framework for exploring the technological literacy of faculty members is the taxonomy of the generations of use of technology for learning. The three generations are the use of technology for information, for interactivity and for customization. Initially, technology was acclaimed for its ability to provide information in media rich format, i.e., to enhance information through a combination of text, sound, static image and video. Not only did this allow hypertext to move beyond the linearity of text; it also allowed visual and aural dimensions to enhance the learning experience, and in fact, facilitated learning considerably for visual and aural learners. In the field of foreign languages, this use of technology has been, and remains, a staple of the field, providing authentic or pedagogically prepared input in the target language in audio or with video, and making realia accessible to learners through virtual visits to cultural monuments and museums. L2 instructors who are confident users of Internet technologies and pre-prepared CALL materials are ideally positioned to guide students in effective use of authentic materials in media rich format in the target language.

For the next generations of use, however, instructors need to be not only confident, but *productive*, users of technologies. The use of technology for interactivity is ideally suited to foster engagement in learning. On a basic level, interactivity allows for learner input, feedback and adjusted input and also many other creative uses that operate on constructivist principles. However, there is considerably more onus on the instructor to integrate interactive materials into the classroom experience and into the total program of study.

The third generation of use focuses on the possibility of creative customization for the diverse motivations, interests and needs of learners. This is a refinement of the earlier two generations and it harnesses the ability of technology to standardize and simultaneously allow for customization where appropriate. L2 instructors who are productive users of technologies will be able to manipulate components with sufficient ease to customize materials by designing unique combinations or sequences or by adapting modules for individual learners. Checklist 3D provides a structure for assessing these different uses.

In much the same way that the active learning construct and the behaviourist / cognitive / constructivist / models allow the academic coordinator to have a general sense of the pedagogical situation of faculty members, these models give a similar overall impression of the technological literacy of L2 instructors. Some general patterns of confident and effective use will be evident, as well as some recurring themes of dissatisfaction, and also some

Strategic Acumen: Linking Pedagogy and Technology

emerging trends linked to productive use of the technologies. The academic coordinator will thus be able to gain a sense of the incremental pace of change in instructors' expertise and comfort with technology, as well as an impression of the depth of change of usage of the lab for program delivery. For the impressionistic tableau to be truly useful, the academic coordinator, in dialogue with L2 instructors will need to actively link the patterns of pedagogical situatedness and technological literacy using what might best be called strategic acumen.

Acumen can be defined as keenness of understanding and insight when dealing with a particular situation. The adjective *strategic* adds a dimension of planning and linkage with the larger context and with the future. Taken as a notion, strategic acumen is the insight that allows an academic coordinator to make sense of the pedagogical positions of L2 instructors and their technological literacy in order to promote optimal use of the lab, a shared resource for language learning. The general attitude that favours the development of acumen is an attitude of attunement, based on awareness of what instructors have mastered and a sense of where they might next profitably devote their energies.

By remaining attuned to the pedagogical situatedness and technological literacy of instructors, the academic coordinator remains keenly aware of the current pedagogical practices and objectives of individual instructors, as well as of their existing levels of technical skill and technological insight. Strategic acumen in a lab director is a holistic notion but for the purposes of discussion, it can be viewed as an amalgam of pedagogical sounding board, technical consultant, and nurturer of a culture of diffusion of effective, innovative practices to ensure optimal use of the lab. The academic coordinator who acts simultaneously as pedagogical sounding board and technical consultant can work with instructors to develop technical skills, in such a way that faculty learn discrete technical skills in the context of particular pedagogical objectives. Particular skill components are best learned by instructors within a pedagogical context in much the same way that grammatical form-focused language structures are best learned in a context that is meaningful for L2 learners. Attunement to both the technical and pedagogical areas is what will increase the academic coordinator's chances of establishing the right balance between pre-established direction and flexibility (or customized tailoring) in training sessions.

In concrete terms, when responding as technical consultant to a routine request from instructors, the academic coordinator can

introduce what is realistic as a next step in the development of technical skills. This is especially true when there exist externally generated reasons for change, for example if the publisher reforms extensively the pedagogical materials in use in a course, if the institution develops new policies on the software it intends to support or if it establishes new guidelines on technological components of courses (e.g., course Web pages or course management software). The attuned academic coordinator is well positioned to tailor technical training so that it targets the needed skills and links them to the pedagogical preferences of L2 instructors. This latter point is a key one because of its impact on faculty motivation.

Similarly, when instructors have a particular pedagogical objective or challenge for which they seek a technological solution, the academic coordinator will need to be an effective sounding board and demonstrate pedagogical acumen, i.e., insight into which technology to use in the teaching/learning situation, for what purpose, how to introduce it and support students learning to use it, how to relate it to other components of the course, and how to validate its use by students (see Checklist 4A). A key component of pedagogical acumen is the ability to imagine benefits for learners and to generate enthusiasm as well as anticipate pitfalls in order to guide the instructor to make a well-informed decision with reasonably good chances of successful implementation. The challenge for the academic coordinator is to develop collective expertise among the faculty in the selection and implementation of technology. Two strategies for doing this are the sharing of information about effective practices, and targeted outreach.

In the matter of information sharing, the lab academic coordinator can collect concrete examples, specific to the institution's language program, of uses of technology that are congruent with, and actively supportive of, particular pedagogical approaches and learning objectives. For example, discussion lists have certain characteristics that make them suitable for specific language learning objectives. As a tool for communication, they can be either synchronous or asynchronous. Synchronous communication allows for a rapid spontaneous exchange among learners to promote greater written fluency. Asynchronous communication, with the possibility of delayed response, grants learners time to reflect and edit in L2, and can thus promote greater accuracy of form. Another characteristic of discussion lists is that they place no limits on the number of participants or on the number of discussions underway at any given point, and participants can be separated in time and space. The pedagogical advantage is that

every participant has a legible and audible voice and the opportunities for ongoing dialogue are extended beyond the classroom. A further characteristic is that the discussions are stored, and can be threaded and used as data for research, for the improvement of instruction, or for learning assessment.

Information sharing, ideally done in collaboration with faculty members who are already using the technology in question, would also include a discussion of the implications of use. For example, it is important for instructors to be aware that rapid spontaneous exchanges in synchronous chat generally do not tend to promote accuracy of form; in fact this type of practice can lead to error fossilization. If an important pedagogical goal is error reduction, it will be necessary to create different opportunities to treat recurring errors, for example through peer editing. It may well be necessary also to actively address with learners the differences between traditional written discourse and the "written speech" of chat programs. An instructor who wishes to develop learners' abilities to express themselves well in conventional written discourse may wish to prepare learners to accomplish specific writing tasks linked to specific content areas and to "pre-publish" them to a discussion list as works-in-progress which can be edited and revised and subsequently published as final versions on a course Web page. The overall framework of information sharing could profitably be a dialogue format that looks at what the characteristics of the technology enable learners and instructors to do, and then at the implications of the particular technical/pedagogical interface. Checklist 4B provides examples of what is enabled pedagogically by discussion lists, the Internet and multimedia technologies.³ Another resource to share with instructors is the highly readable and extremely useful article by Arthur Chickering and Stephen Erhmann on the use of technology as a lever to support the Seven Principles of Good Practice in Undergraduate Education, in particular the principle of active learning (Chickering and Erhmann 1996).

As well as sharing information widely, the academic coordinator can use targeted outreach to approach specific instructors. It is clear that certain key individuals always warrant one's full attention, either because of their role within the department (chairs, language program directors, faculty members in charge of curriculum planning), or because of their teaching duties (directors of key multi-section courses, directors of any courses that are changing their pedagogical materials, directors of programs of new languages being added), or because of their work with

CALL or with innovative teaching. Beyond this obvious group, it is sometimes difficult to know how to approach faculty members and how to activate the learning spiral that combines pedagogical awareness with increasing levels of technical skill. What follows is a work-in-progress of patterns that emerge from the preceding discussion of the pedagogical/technological interface. I have chosen to distinguish three general levels of technical expertise, which I call "confident user with basic technical skills," "confident/productive user with increased technical skills," and "productive user with advanced technical skills." While there will be considerable variation within each of the three levels, the distinctions remain useful because they correspond roughly to the three generations of users of technology: for information, for interactivity, and for customization. I propose to look at each of the three levels of user by linking them to the patterns of pedagogical situatedness and technological literacy already discussed.

The level of "confident user with basic technical skills" characterizes L2 instructors who have a low to mid level interest in active learning and retain mid to high attachment to the syllabus and to the pedagogical materials in use in the courses they teach. They generally show mid to high attachment to accuracy in the target language and to activities for practice and consolidation. Assessment may be both formative and summative, with summative assessment accounting for a higher percentage of the final grade. They will generally prefer to use email for distribution of information, and also prefer to use established "classic" Websites to provide access to additional resources such as documents in the target language, cultural information, dictionaries, and other specific language learning activities. In terms of technical expertise, confident users use email features such as attachments, folders and address book reasonably proficiently. They are confident using word-processing in the target language; and are generally at ease using the commercial software that comes packaged with pedagogical materials.

The level of "confident/productive user with increased technical skills" characterizes instructors who show mid to high interest in active learning, and who show interest in cognitive learning principles, which call for the effective use of presentation software by both instructors and learners. These instructors also show an awareness of the fluency/accuracy tradeoff and show interest in exploring the interactivity inherent in email, chat rooms, or discussion lists. They show moderate to high attachment to formative assessment and are interested in individual project work, portfolios and other constructivist type activities that can be structured for learners. They show interest in preparing

meaningful activities for practice and consolidation of linguistic forms, and are interested in Internet searches to see what the learners find on their own. They are prepared to teach search strategies and criteria for the evaluation of sites. They are also interested in exploring and adapting ancillary materials found on publisher Websites. In terms of technical expertise, confident/productive users with increased technical skills are at ease with most email features, such as attachments, folders, address book, filters and blocks; they also use discussion lists in both large and small groups. They use word-processing in the target language with tables, templates and the style features that allow for rapid conversion of text documents into presentation software. In addition to using presentation software themselves for instruction, they guide students to use it effectively. They use commercial software and ancillary materials judiciously; can maintain a basic personal or course Web page; and can use course management software if assisted with initial set-up. They actively monitor sites and are aware of new software for the language they teach.

The level of "productive user with advanced level technical skills" characterizes instructors who show high interest in active learning. They are generally interested in both cognitive and constructivist learning principles, which call for creative and flexible use of presentation software by both instructors and learners. They generally show high attachment to formative assessment and are interested in group project work, collaboration, e-portfolios and other constructivist type activities that need to be customized for individual learners or groups of learners. They show interest in preparing meaningful activities for practice and consolidation of linguistic forms; and are prepared to have students generate such activities themselves with appropriate guidance. They are interested in using Internet searches to develop critical skills in learners; and are prepared to guide learners in preparing materials for publication on the Web. They tend to select and adapt ancillary materials found on publisher Websites; and are interested in preparing their own materials if they are not satisfied with what is already available. These instructors are generally more likely to produce CALL materials and to conduct CALL research projects. On the technical level, productive users with advanced technical skills use email with attachments, folders, address book; filters and blocks, and they have numerous strategies for surviving email overload. They encourage learners to use email with penpals and within discussion lists. They use word-processing in the target language with tables, templates, style features and text mark-up to provide feedback to students. They use presentation software with audio,

video, graphics and Web links for instruction and prepare students to use it as well. They can set up and maintain a course Web page; can use course management software effectively. They actively monitor sites and new software for the language they teach. They critically review Websites and software; and can create interactive instructional modules or other learning objects. They are interested in using technology to customize materials or programs of study for learners; and may be interested in mixed-mode or distance formats.

The foregoing categories of users show a pattern of L2 instructors benefiting from greater expertise with technology as an enabler of pedagogical creativity and flexibility, in order to make possible more effective learning for different types of language learners. It is noteworthy and significant that this pattern bears remarkable similarity to that of language learners seeking to attain greater levels of proficiency in the target language, in order to be able to communicate their own ideas more effectively in a variety of contexts.

Conclusion

The guidelines for proficiency in foreign languages, as articulated by the American Council on the Teaching of Foreign Languages (ACTFL proficiency guidelines⁴), provide insight into the complex link between incremental mastery of form and the development of greater flexibility. According to the ACTFL guidelines, as learners actively work to develop proficiency in the target language, an imitative, slavish preoccupation with accuracy of form can cause them to disconnect from the very point of language learning. True fluency is much more than the ability to repeat quickly and flawlessly exact forms one has been taught; rather, it is the ability to use flexibly, creatively and appropriately, the forms that have been internalized and are thus available for new uses as required in different communicative situations (in ACTFL terms, where function, content, context and accuracy meet for a felicitous outcome (Galloway 1987)). In a parallel way, for L2 instructors, increasing technical expertise is pointless if divorced from the overall goal, which is to constantly view technical skills as enablers of pedagogical objectives to achieve the variety of applications and generate the learning activities one judges most helpful to specific groups of language learners.

As with learning a foreign language, the process for L2 instructors is not linear but spiral, and it involves adopting an optimistic stance of creativity and risk-taking. The same applies to lab directors. Conceptualizing the academic function of the lab director in an optimistic way that favours risk-taking will allow one to articulate a vision for the lab that takes into account what is currently being done, yet move continually in a grounded and

realistic way to innovative, more effective practices. Active efforts to stay attuned will keep one sensitive to both the evolving pedagogical preferences of faculty and to their evolving levels of comfort and skill with technology. This can enhance one's credibility within the institutional setting, especially if one periodically conducts surveys and generates data on current practices and outcomes. Conceptualizing one's role as a partner with strategic acumen for linking pedagogy and technology is in fact a critical reflective stance that sees both current realities and emerging possibilities.

Endnotes

1. To access the checklists, click on the link IALLT 2003 Checklists at <<http://www.arts.yorku.ca/french/dwoody>>.
2. Arthur Gamson and Zelda Gamson first articulated the Seven Principles. They present an excellent overview of their application in book format in Arthur Chickering and Zelda Gamson (Eds.), *Applying the Seven Principles for Good Practice in Undergraduate Education* (San Francisco: Jossey-Bass, 1991). An excellent Website devoted to the application of the Seven Principles is the Brigham Young University site at <<http://www.byu.edu/fc/pages/tchlnmpages/7princip.html>>.
3. The basis for Checklist 4B was an IALLT 2001 presentation prepared in collaboration with my colleague, Monique Adriaen.
4. The ACTFL proficiency guidelines are available at <<http://www.sil.org/lingualinks/languagelearning/otherresources/actflproficiencyguidelines/contents.htm>>.

Bibliography

- American Council on the Teaching of Foreign Languages. ACTFL Proficiency Guidelines available on-line at <<http://www.sil.org/lingualinks/languagelearning/otherresources/actflproficiencyguidelines/contents.htm>>.
- American Council on the Teaching of Foreign Languages, American Association of Teachers of French, American Association of Teachers of German, American Association of Teachers of Spanish and Portuguese. 1996. *Standards for Foreign Language Learning: Preparing for the 21st Century*. Lawrence KS: Allen Press.

- Barr, Robert and Tagg, John. 1995. "From Teaching to Learning: A New Paradigm for Undergraduate Education." *Change* 27.6: 13-25.
- Byrnes, Heidi (Ed.). 1998. *Learning Foreign and Second Languages: Perspectives in Research and Scholarship*. New York: Modern Language Association of America.
- Byrnes, Heidi and Canale, Michael (Eds.). 1987. *Defining and Developing Proficiency: Guidelines, Implementations and Concepts*. Lincolnwood, Illinois: National Textbook Company.
- Chickering, Arthur and Ehrmann, Stephen. 1996. "Implementing the Seven Principles: Technology as Lever." *AAHE Bulletin* October: 3-6. Available on-line at <<http://www.tltgroup.org/programs/seven.html>>.
- Chickering, Arthur and Gamson, Zelda (Eds.). 1991. *Applying the Seven Principles for Good Practice in Undergraduate Education*. San Francisco: Jossey-Bass, Series: New Directions in Teaching and Learning.
- Christison Mary Ann and Stoller, Fredericka. 1997. *Handbook for Language Program Administrators*. Burlingame, California: Alta Book Center Publishers.
- Daigle, Stephen and Jarmon, Carolyn. 1997.. "Building the Campus Infrastructure that Really Counts." *Educom Review* 32.4: 35-38.
- Krashen, Stephen. 1981. *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon Press.
- Levy, Michael. 1997. *Computer Assisted Language Learning*. Oxford: Clarendon Press.
- Muyskens, Judith (Ed.). 1997. *New Ways of Learning and Teaching: Focus on Technology and Foreign Language Education*. Boston, Massachusetts: Heinle and Heinle.
- Reagan, Timothy and Osborn, Terry. 2002. *The Foreign Language Educator in Society: Toward a Critical Pedagogy*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Rosenthal, Judith (Ed.). 2000. *Handbook of Undergraduate Second Language Education*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Appendices

The following checklists are proposed as starting points for reflection on the issues that lab directors will need to consider when assessing their own particular situation. These are not discrete items that can be addressed tidily and efficiently; rather they are concrete questions designed to help lab directors identify emerging patterns and clarify issues that will require ongoing monitoring.

The checklists are available on line. Click on IALLT 2003
Checklists at <<http://www.arts.yorku.ca/french/dwoody>>.

Checklist 1A

Academic Coordination - Activities to support language learners

- ☐ *User support:* do we provide clear information on technical matters such as accounts, logins, passwords and access to programs, a trouble-shooting contact?
- ☐ *User support:* do we provide clear information on practical matters such as hours, rules and other conditions of use of the lab?
- ☐ *User support:* do we provide language specific support such as guidesheets for the use of the particular software and to input editors, access to key Websites for the study of the particular language (e.g., search engines, dictionaries, grammar tutors, news and other authentic materials, cultural and virtual tourism sites, etc)?
- ☐ Do we have a schedule of Web page maintenance to ensure that user support files are always current?
- ☐ *User development:* do we have a grasp of how language learners are developing computer literacy over the sequence of courses in a particular program of study, eg. how they are developing increasing sophistication with word-processing and presentation software, moving from information gathering to evaluative work with Websites? How can we develop and support this in given courses and programs of study?
- ☐ *User development:* do we provide access to placement tests, links to self-access learning modules for review, links for

consolidation of learning or exposure to new concepts; information re language learning strategies and motivation, guidelines on effective use of synchronous chat and other discussion formats?

- ☐ *User development:* do we provide opportunities for learners to participate in workshops, give workshops, participate in research projects, find employment as student lab assistants?
-

Checklist 1B

Academic Coordination - Activities of liaison with the institution at large

- ☐ Do we know well our key contacts for reporting structures and newsletters: department chairs, deans, executive officers who oversee budgets? Do we have a schedule of appearances at department or Faculty meetings?
- ☐ Do we know well our key contacts who are counterparts and collaborators in technology within the institution: head of information technology, head of instructional technology, directors of other labs on campus with a similar mandate to support academic departments?

How do we stay current on technological developments (new decisions re institutional licences) and training offered by different units in the institution?

- ☐ Do we participate in committees involved in decision making re the acquisition of technology and software, or roundtables involved in policy setting of the institutional technology strategy; if not who are our key contacts in this area?
 - ☐ Do we know well our key contacts in the area of facilities planning and security so that a renovation or upgrade can be planned and realized efficiently?
-

Checklist 1C

Academic Coordination - Activities of liaison with L2 instructors

What I am doing to maintain good communication with key individuals such as department chairs and language program directors?

- ☐ Have I identified the key individuals for each language taught at the institution, and do I have good communication with them. (Key individuals are the one or two faculty members who are actively committed to the ongoing renewal of the particular language program, whether or not they as individuals are keen on technology. They could also be instructors who link the language program to literary, linguistic and cultural studies.)
- ☐ Have I established good communication with the course directors of all key multi-section language courses? Do I track the length of time particular pedagogical materials have been in use in particular courses? Do I have a format to summarize pattern of usage of the lab in these courses? Am I able to represent schematically the pattern of usage of the lab throughout the particular language program?
- ☐ Have I put in place a procedure for keeping abreast of new software for each of the languages taught? Do I have for each language a contact with whom to discuss new software programs to determine if it might be useful to demo them for instructors?
- ☐ Am I aware of the details of language acquisition research being conducted by L2 instructors? Are any of my faculty receiving institutional recognition for innovative teaching projects?

Checklist 2A

Learning about pedagogical focus on principles of active learning

How frequently do the following keywords recur in discussions with a given faculty member?

- contact with students
- student motivation
- learning strategies
- collaborative work
- reflective self-assessment
- student portfolios
- prompt useful feedback

- syllabus and textbook as servants not master
- high expectations
- guidance on time management for assignments
- clear learning objectives
- diverse formats to respect different learning styles

What is the instructor's interest in active learning?

☐ low ☐ mid ☐ high

The instructor's interest in active learning is

☐ increasing ☐ decreasing

Where is the instructor's highest use of active learning:

☐ which courses ☐ which level

How does this correlate with other instructors of the same language?

Checklist 2B

Learning about eclectic instructors' tendencies towards behaviourist / cognitive / constructivist principles.

Behaviourist: How can I characterize the attachment of this instructor to the use of imitative activities for fluency and accuracy (through practice, drills and other exercises to promote the consolidation and internalization of forms)?

☐ low ☐ mid ☐ high

Cognitive: How can I characterize the use of cognitive and metacognitive strategies for L2 instruction by a given faculty member? For example, how frequently does the instructor refer to notions such as learning skills, language learning strategies, intellectual development, semantic fields for vocabulary acquisition; reading for meaning, content-based learning?

☐ low frequency ☐ mid frequency ☐ high frequency

Constructivist: How can I characterize the attachment of this faculty member to knowledge construction? How frequently does the instructor allude to notions such as collaborative or cooperative learning; meaningful learning tasks; authentic contextualized tasks; reflective inquiry?

☐ low frequency ☐ mid frequency ☐ high frequency

What appears to be the instructor's eclectic pattern—usually a combination of at least two tendencies with one slightly more prominent than the others?

☐behaviourist ☐cognitive ☐constructivist

How does this correlate with other instructors of the same language?

Are there implications for the language centre?

Checklist 2C

Developing awareness of other discrete elements of the instructor's approach

Sequential learning: how attached is the instructor to the syllabus, the textbook and ancillary materials?

☐low ☐mid ☐high

Rate the following as guiding concerns for a given instructor:

reading comprehension:

☐low ☐mid ☐high

written production:

☐low ☐mid ☐high

listening skills

☐low ☐mid ☐high

oral proficiency

☐low ☐mid ☐high

cultural competence

☐low ☐mid ☐high

other thematic content

☐low ☐mid ☐high

formative assessment

☐low ☐mid ☐high

summative assessment

☐low ☐mid ☐high.

Are there specific criteria and materials in place for assessment?

- ☐ ACTFL guidelines?
 - ☐ publisher's test bank?
 - ☐ independent project work?
 - ☐ creative project work?
-

Checklist 3A

Developing awareness of comfort levels of faculty with technology for communication

Email: What particular email application does the faculty member use?

- ☐ Are there others in the same language section who use the same application?

What is the comfort level with attachments:

☐ low ☐ mid ☐ high

folders:

☐ low ☐ mid ☐ high

filters:

☐ low ☐ mid ☐ high

blockers:

☐ low ☐ mid ☐ high

address book features:

☐ low ☐ mid ☐ high

What in particular about email causes frustration? What engenders satisfaction?

What would be a useful addition to the faculty member's skill set?

Distribution/Discussion lists

- ☐ Has the faculty member used a distribution list?
- ☐ Has the faculty member used a class discussion list?
- ☐ Would the instructor be interested in a workshop on effective use of discussion lists?
- ☐ Is there any interest in penpal arrangements for communication with native speakers or another group of learners at a distant location?
- ☐ Is the faculty member interested in using MOO environments, synchronous chat, forums or messaging?
- ☐ Would a workshop be helpful?

Which other faculty members in the same language unit might be interested?

Checklist 3B**Developing awareness of comfort levels of faculty with presentation software****Presentation of lecture notes and handouts with word-processing:**

- ☐ Is the instructor comfortable with the basics of word-processing (or other software that offers writing assistance) in the language he/she teaches?
- ☐ Does the instructor have a format for presenting to students the expectations re use of pre-writing software and of word-processing in the course with grammar and spell-check etc.?
- ☐ Are there templates in word-processing which may be of interest and use to particular instructors in particular courses?
- ☐ Would text mark-up be a useful skill for this instructor?
- ☐ Is the instructor aware of style features (e.g., use of headings) and the ease with which, for example, a Word document can be converted into a PowerPoint presentation
- ☐ Is this instructor's level consistent with that of other instructors in the language?
- ☐ Are there matters that could be addressed with a timely, short, focused training session?

Presentation of lecture notes and handouts with presentation software such as PowerPoint.

- ☐ Is the instructor comfortable with the basics of presentation software, to generate slides?
 - ☐ Does the instructor have students use presentation software?
 - ☐ Would it be useful to have a guidesheet for students to explain expectations and clarify assessment of their work?
 - ☐ Is there a desire to learn to incorporate Websites, audio, video, graphics?
-

Who else is interested in learning this?

Who would be the best resource on campus to provide this type of workshop?

Presentation of course material via course Web page or in a course management shell (e.g., Blackboard or WebCT).

- ☐ Is the instructor comfortable with the basics of course Web page design and use?

Who would be the best resource on campus to provide assistance with initially setting up course Web pages?

- ☐ Is there a simple Web page maintenance program available, for example Macromedia *Contribute*, which permits updates by easy surface manipulation of a page initially designed in *Dreamweaver*?

- ☐ Is the instructor interested in adding slides, audio or video to the Web page?

- ☐ Is the instructor interested in course management software?

Who on campus would be the best resource to provide assistance with this?

- ☐ Is this instructor's level of interest typical of that of those in the language section?

- ☐ Is there a pattern of interest and momentum on which one might try to capitalize?

- ☐ Are there grants available within the institution to support the conversion of courses into mixed mode or technologically enhanced mode?

Which instructors and courses would be ideal candidates for such support?

How could the language centre benefit by being a partner in this endeavour?

Checklist 3C**Developing awareness of comfort levels of faculty with CALL****Second language acquisition (SLA) research using technology:**

- ☐ Is the faculty member gathering data on usage, tracking usage, for either affective or quantitative research into learner performance?
- ☐ Is the faculty member conducting any benchmarking work or using sample student work to create levels of performance within a course or within a curriculum?
- ☐ Is the faculty member doing classroom-based or lab-based research into SLA?
- ☐ Are there any other faculty members with similar SLA research interests and who might be interested in conducting their research formally in the lab?

CALL materials use and production, and research into CALL

- ☐ Is the faculty member comfortable using commercially available CALL software?
- ☐ Is the faculty member comfortable with the technological components of the pedagogical materials in use (CD for listening activities, publisher's Website with additional resources and learning activities; electronic workbooks)?
- ☐ Is the the faculty member interested in critically reviewing the materials for a software review publication or database?

Is the faculty member interested in creating on-line modules either within a course management package or by using language-friendly software such as Hot Potatoes?

Which type of modules appear to be of greatest interest or value?

- ☐ tutorials or lessons
- ☐ programmed learning/drill with error diagnosis and correction

- ☐ electronic workbook
 - ☐ activities to accompany Websites or cultural, literary readings;
 - ☐ tests and quizzes (multiple choice, dictées, vocabulary, cloze passages)
 - ☐ simulations
 - ☐ games (matching, crosswords, etc)
 - ☐ tools (glosses, templates, lexicons, hypertext tools, etc)
 - ☐ text reconstruction, rearrangement
 - ☐ samples/database of authentic language use
- ☐ Are other faculty members interested in similar modules?
- ☐ Are there resources within the institution to support the development of such modules?

Checklist 3D

Developing awareness of the use of technology for information, interactivity, customization

To what extent does the faculty member use technology primarily to gain access to information and provide information to others?

never—rarely—sometimes—frequently—always

To what extent does the faculty member incorporate technologies of interactivity?

never—rarely—sometimes—frequently—always

To what extent is the faculty member interested in customization?

never—rarely—sometimes—frequently—always

What is the pattern of use of technology for individual language sections?

Which types of workshop would be of benefit to members on the threshold between confident user and productive user?

Checklist 4A
Moving from technical response to pedagogical concerns

- ☐ Does the instructor have a sense of how the learning objectives might be attained by the use of this particular technological innovation?
- ☐ Can the instructor articulate what the technology will enable?
- ☐ Is the instructor aware of any downside?
- ☐ Does the instructor have a sense of how to present the innovation to learners and to colleagues in a multi-section course?

How does this component relate to other components of the course?

How will its use be assessed by students?

Checklist 4B
Sharing information about the pedagogical/ technological interface

Discussion lists: characteristics and what they enable pedagogically

communication tool that enables synchronous or asynchronous chat of learners who may be separated in time and/or space

text-based with instant response (synchronous) that allows for development of written fluency

text-based with delayed response (asynchronous) that allows for reflection and editing and may foster greater accuracy of form

places no limit on number of participants and discussion, thus gives a legible and audible voice to every learner

asynchronous chat extends the classroom for ongoing dialogue as an extension of class activities, or for pre-class activities

conversations are stored and threaded and can be used for research, learning assessment or improvement of instruction

Discussion lists: implications to consider

need to be aware of the either/or choice between developing fluency and developing accuracy.

Can a judicious mix of synchronous and asynchronous chat permit both? Can peer-editing make a difference?

need to be aware of the need to actively address features of written discourse if one wishes learners to move beyond "written speech"

need to be aware of the need to clarify expectations re type, frequency and quality of contributions by learners, frequency, type and feedback from instructor, whether and how the contributions will be assessed

The Internet: characteristics and what they enable pedagogically

provides access to an information bank that is readily and rapidly accessible, always available, unlimited and unrated in content, from multiple viewpoints

is constantly being updated and modified and thus is ideal for monitoring evolving situations

unlimited in time and space and thus provides access to authentic materials in target languages

The Internet: implications to consider

need to be aware that the instructor relinquishes authority

need to point students in the direction of worthwhile sites, or teach search strategies, critical reading strategies and evaluative skills of sites

need to actively develop in learners the skills of synthesis and integration if they are to make sense of the fragmented and ever-changing information they access

need to develop reading strategies of skimming and use of visuals to help learners make sense of authentic materials that may be somewhat beyond them linguistically

Multimedia technologies: characteristics and what they enable pedagogically

they unite sound, text, graphics, images and video and thus accommodate many different learning styles while providing rich, non-linear input

they allow for the storage of video and thus permit the recreation of authentic environments

they incorporate interactivity and thus offer multiple paths to learners

can be unlimited in access and thus allow for learner control of pacing and time of use, and repeated use if desired because content remains constant

Multimedia technologies: implications to consider

need for individualized and formative feedback, need to consider how to take advantage of the creative, collaborative opportunities the software provides

authentic environments may pose problems for learners at different linguistic levels

learners may require guidance in learning to choose paths that lead to maximum learning

need to establish clear linkage to classroom activities so that learners have opportunities to integrate learning experiences

