

Learning foreign languages at a distance

Characteristics of effective online courses

Katharine Nielson, MA

Marta Gonzalez-Lloret, PhD

Kim Pinckney, MA

Executive Summary

PURPOSE

Due to the nationwide shortage of foreign language teachers and funding for language-learning materials—especially in critical languages—development of a national system of online (i.e., distance) and hybrid (i.e., blended online and face-to-face) courses is essential to make more courses in more languages available to U.S. students, government, and military personnel. While distance and hybrid courses offer some advantages to learners and institutions, they also come with challenges that can impede their successful implementation.

The University of Maryland Center for Advanced Study of Language (CASL) reviewed the existing literature on online and hybrid learning as well as foreign language learning and teaching in order to recommend best practices for the development of distance and blended foreign language courses.

CONCLUSIONS

CASL's review of recent and relevant literature revealed the following conclusions:

1 Online courses are flexible but may have challenges.

Online courses, which are taught completely at a distance using various

PURPOSE—To recommend best practices for the development of distance and hybrid foreign language courses.

CONCLUSIONS—Distance and blended learning programs will be most successful when they include instructor training and courses designed to maximize the benefits of the online environment.

RELEVANCE—A well-designed system of online and hybrid language courses could make quality language instruction available to any student with Internet access.

TTO 82131 E.3.1 | CDRL A017 | DID DI-MISC 80508B | Contract No. H98230-07-D-0175

technological tools, promote student-centered learning, can expose students to authentic texts and tasks, and can be tailored to the needs of individuals. However, along with these advantages come some challenges: instructors may have difficulty creating a sense of community, which is necessary to foster collaborative learning; students and instructors may have technological issues that preclude participation; and designing and implementing an online course requires a significant time investment.

2 The face-to-face component of hybrid courses may solve the challenges of online courses.

Hybrid courses, which have a face-to-face component, can have all the benefits of online courses while also controlling for some disadvantages. For example, instructors can create a collaborative community as well as resolve technical problems more easily through in-person meetings.

3 Careful course design and instructor training are the keys to an effective online or hybrid language-learning program.

An online or hybrid language course must provide students with access to multiple

sources of authentic input, modified to match their abilities. In addition, students should have frequent opportunities to interact through computer mediated communication, with their instructor, classmates, and other interlocutors. Students should receive feedback often and complete communicative tasks with real-world applicability.

RELEVANCE

Developing a well-designed system of online and hybrid language courses could make quality language instruction available to any student with access to the Internet, which could increase the number of foreign language speakers in the United States. ■

Corresponding Author and Reprints: Katharine Nielson, MA, University of Maryland Center for Advanced Study of Language, (301) 226-8900, knielson@casl.umd.edu, www.casl.umd.edu.

Funding/Support: This material is based upon work supported, in whole or in part, with funding from the United States Government. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the University of Maryland, College Park and/or any agency or entity of the United States Government. The Contracting Officer's Representative for this project is Beth Mackey, Language Testing Program Manager, E3 Center for Language, (410) 854-0452, bamacke@nsa.gov.

Technical Details

TTO 82131 E.3.1 ■ CDRL A017 ■ DID DII-MISC 80508B ■ Contract No. H98230-07-D0175

Learning Foreign Languages at a Distance

Characteristics of effective online courses

Katharine Nielson, MA; Marta Gonzalez-Lloret, Ph.D.; Kim Pinckney, MA

Educational institutions have been turning to online distance courses as a way to solve problems of space and time; Internet-based learning programs do not require classroom space, can be accessed at any time, and allow students and instructors to work independently. Despite these important advantages, there are many issues associated with such courses that potentially affect their successful implementation. The following technical report discusses different models of online courses, reviews characteristics of effective programs, and explains how distance courses can be designed to teach foreign languages successfully. Finally, some of the potential challenges of teaching at a distance two less-commonly-taught-languages (LCTLs), Arabic and Chinese, are considered.

DISTANCE COURSES VS. HYBRID COURSES

While distance courses and hybrid (or blended) courses are often lumped together, they can be very different and should be considered separately. Throughout this paper, when we refer to *distance* courses, which we also refer to as online courses, we mean courses in which no face-to-face interaction takes place between the instructor and students. All instruction and interaction occur at a distance through various technological tools.¹ *Hybrid* courses, which are also referred to as blended courses or, sometimes, web-enhanced courses, are significantly different from distance courses because there is a face-to-face component.

Distance Courses

Distance courses generally require a Learning Management System (LMS) or Course Management System (CMS) to deliver content (e.g., Blackboard, Moodle, or Sakai). In addition, they sometimes have a course website, wiki, forum or blog. Content is delivered through these course tools as well as through web-based learning objects, and students and instructors communicate with one another in speech and in writing through discussion boards, instant messaging, email, and telephone. These courses often rely on pre-written “modules” of instructional materials as well as e-textbooks and workbooks.

Flexibility is a significant advantage of online courses. They can be completely asynchronous (meaning that instructors and students never need to be available at the same time), they can be self-paced, and they can be individualized. While a teacher in a traditional classroom must be concerned with providing instruction for all students simultaneously, instructors in online environments can tailor instruction, feedback, and assignments to each student.

Despite these advantages, distance courses must compensate for inherent disadvantages that come with a virtual classroom. Most obviously, it is difficult to create a sense of community in an online class where students and instructors

¹ It is important to remember that for our purposes, all distance courses have a participating instructor; we are not including correspondence or other self-study courses where students submit work to be graded but otherwise do not interact with an instructor or classmates.

never meet one another face-to-faceⁱ. While this lack of community affects all types of classes, it is particularly troublesome in foreign language instruction, where learning occurs through interactionⁱⁱ. In a face-to-face classroom, the infrastructure for communication and collaboration is already present; in an online classroom instructors must provide a social space for students to complete language tasksⁱⁱⁱ. In addition, the asynchronous nature of the online environment means there is often a significant time lag in interactions (between students and between student and instructor). This delay can have negative consequences for students' ability to pay attention to interactions and incorporate feedback, which is especially problematic in a foreign language classroom where acquisition is dependent upon feedback and noticing².

The technology used for online courses often causes problems for students and instructors, either because they are unfamiliar with the tools or because technological glitches make accessing the course or its components difficult or impossible. While some students can overcome these problems, others become very frustrated with the technology, which then affects their class performance, participation, and overall experience. And not only are instructors subject to these difficulties themselves, but they are also often tasked with helping students sort out issues related to technology, if only to point them to proper avenues of help. This need to coach students through the course components is time consuming and comes at the expense of instructor-student communication about course content. Because more technologically savvy people have an easier time navigating online courses, they have an edge over those who are intimidated by the new medium.

Regardless of a student or instructor's experience with technology, online courses are more time consuming than their face-to-face counterparts. All details about a course, from the guidelines about class participation to the location of the various course components, must be in writing because there is no chance to explain anything in person. And students do not have the benefit of hearing each other's questions in a group setting, so there is often repetition in what an instructor must provide to each student. Most (if not all) communication in an online course is in writing, which means that a much more significant portion of the class is spent on reading and writing. Before a course can be taught for the first time, an instructor must spend hours upon hours either locating appropriate course content or creating it from scratch and setting up an online classroom (creating a grade book, typing up discussion topics, locating and posting multimedia, etc.). While a distance course solves some problems, it comes with a set of challenges distinct from those in traditional, in-person classroom settings of which anyone contemplating such an approach should be aware.

Hybrid Courses

In a hybrid course, some proportion of what would be class time in a traditional course is spent completing computer-based activities. The format of hybrid courses varies widely from those that are divided evenly between face-to-face and virtual meetings to those that only meet several times a semester for in-person testing and question/answer sessions, to those that begin with an intensive period of face-to-face instruction and then continue for a longer period online. Depending upon their format, hybrid courses include a range of the components of online courses based on the percentage of time spent out of the traditional classroom.

A hybrid class can be extremely efficient because concepts are introduced in person and then practiced and reinforced at a distance (or vice-versa, i.e., introduced at a distance and then discussed and clarified face-to-face). Some of the problems that are inherent to purely online courses are avoided with a hybrid approach because students and instructors can meet in person to develop rapport (which often carries into the online environment), deal with problems, and handle administrative issues. When done well, this blended approach to learning can have all the advantages of both virtual and face-to-face environments^{iv}.

² See Schmidt (2001) for a discussion of how attention and noticing work in SLA.

CHARACTERISTICS OF EFFECTIVE DISTANCE AND BLENDED LEARNING PROGRAMS

As we have discussed, hybrid courses are critically different from online programs because they include an in-person component, which can alleviate many of the issues associated with pure distance learning. There are more considerations for course design and instructor training with true distance courses, so we will begin our discussion there, concluding with consideration of how hybrid courses can be designed to include the best of both worlds.

Distance Learning

Course Design

Designing an online course is an extensive undertaking.³ A distance course should not be a “translation” of an equivalent face-to-face course, with the lecture notes posted as PowerPoint slides and a few discussion questions. At the other extreme, online course designers should not use technology simply for the sake of using technology (e.g., using virtual world software to teach because it is new and not because it contributes anything to the language learning experience^v). Ideally, an online course should provide students with learning experiences that are not possible in a traditional face-to-face classroom. Therefore, the course designer must consider the type of content being delivered and the ways that the web-based environment can *enhance* the learning experience.

Above all, online classrooms should be user-friendly, student-centered, and flexible. If students cannot understand how the classroom works, they will not benefit from the course. The CMS should be easy to navigate and should include 24-7 technical support. As part of a student-centered approach, it is extremely important for instructors and course designers to consider their audience. They should take care to make sure that the course tools will work for all students, accommodating all levels of technology access.⁴ The webspaces used by the instructor should be visually appealing and error-free^{vi}. Announcements, notes, and comments from the instructor should be easy to read (e.g., no red, no obscure fonts, no SHOUTING). Instructors should prepare a webpage with frequently asked questions to avoid endlessly repeating themselves and to provide students with answers without the delay of an emailed response. In addition, instructors should develop tutorials for how to use the classroom (e.g., how to submit assignments, how to handle technical difficulties, how to contact the instructor, how and how often to participate, etc.)^{vii}.

Once the online workspace is developed, instructors must focus on the course materials. Online course content should be delivered in a web-friendly format^{viii}, which means that written materials should be “chunked” into visually appealing nuggets that are easy to read. Text should be interactive with graphics, definitions, and examples as well as hyperlinks to pages with more in-depth content, longer definitions, and outside sources. In foreign language courses, instructors should embed video clips and sound files in lieu of pages of text. Students should have to answer self-correcting questions as they work through course content in order to check their comprehension. Finally, all outside links and resources must be housed on a secure server so that there are no “dead” links or issues with Intellectual Property.

In addition to providing well-thought-out content, an online instructor must develop assignments and activities that make the most of the virtual environment. Exercises should be task-based⁵ and require student-student collaboration as well as individual effort. Pedagogically appropriate technology should be used^{ix}, especially when it can provide opportunities not easy to reproduce in a face-to-face classroom such as access to real world materials^x, authentic activities^{xi}, and expert performances^{xii}. For example, students in a distance foreign language class could practice chatting with native speaker conversation partners, learn how to cook culturally significant foods from video demonstrations, visit online retailers who advertise in the target language, listen to radio programs on topics of interest, and create their own cultural podcasts in the target language.

A successful course involves careful planning, design, development, evaluation and implementation so that it fosters learning and is meaningful to all stakeholders. For example, a flexible learning system is meaningful to students when it is easily accessible, well-designed, learner-centered, and efficient. When students engage in the course and are successful, then the learning is meaningful to instructors and designers. And finally, when the course has a good return-on-investment, a high to moderate level of student satisfaction, and a low drop-out rate, the learning system is meaningful to the hosting institution^{xiii}.

³ Colleges and universities with interactive online course offerings use teams of instructional designers, faculty members, graphic designers, and computer programmers to create their courses, which can take over a year to create and implement.

⁴ See White, 2006 (255) for a review of research on technology choice and its sociocultural implications.

⁵ See Doughty and Long (2003) for a discussion of why task-based language teaching is especially appropriate in the online environment.

Instructor Training

In order to teach an online course effectively, instructors require specialized training in online teaching as well as in their content area^{xiv}. Instructors are often called upon to teach courses that have been developed by others, since one of the draws of online education is the reusability of course content and design. Nevertheless, it is important for all instructors—even those who are not responsible for course design—to be trained in designing effective online courses (as discussed above). In addition, they should be trained in how to use the CMS, as well as in how to use all the technological tools associated with the course^{xv}. And, just as students should be provided with 24-7 technical support, teachers also should receive this support as they are creating and teaching their online courses.

It is very helpful for instructors to have access to archived versions of the courses they are teaching so that they can get a feel for how they might be organized and conducted. And providing a new instructor with a seasoned mentor is always a good idea. Because an online course is so different from its face-to-face equivalent, new teachers need guidelines about how to conduct them. For example, it is important for instructors to be very “visible” in the classroom by updating announcements frequently and responding to student discussions and assignments as quickly and as thoughtfully as possible. Instructors should also use the CMS for communication so that information does not get buried offline in emails. Finally, instructors should model the type of behavior they expect from their student. In a foreign language class where interaction is critical, instructors should try to engage the students in communication, through computer-mediated chat, asynchronous discussions, real-time voice chat, and assignments that require student-student interaction.

Blended Learning

A well-designed blended course will have a pedagogically motivated rationale for time spent in class and time spent out of class. That is, the amount of time spent out of class will not be dictated by an institution’s need to double existing classroom space, but determined based on the types of activities students complete and the percentage of them best done at a distance. And if department policies do determine the in-class versus out-of-class breakdown, hybrid course designers should do their best to make each environment work to its advantages. For example, foreign language students should use class time to complete group activities and receive instructor feedback on their writing, and they should use out-of-class time to practice speaking with a long-distance conversation partner and to read texts annotated with multi-media references. Ideally, any technology required for the class should be introduced in person so that students do not spend time trying to figure out how to use them on their own (and so instructors can avoid writing lengthy explanations and handling endless emails with technical details).

An important job for hybrid instructors is to integrate the online portion of the class with the in-person meetings. So if an instructor has students work online on a partner activity using computer-mediated chat, the conversation partners should report back to the class on the outcome of their tasks when the whole group meets for a face-to-face discussion. If students view target language video clips or sound clips online, they should discuss them as a class. And then those discussions should continue in the online classroom on the class message-board, forum, or class blog. Essentially, the online classroom and the face-to-face classroom should support one another. The beauty of the blended approach is that the most difficult aspect of teaching online—fostering a sense of community—can be achieved in the physical classroom.

CHARACTERISTICS OF AN EFFECTIVE LANGUAGE LEARNING PROGRAM

Throughout our discussion of online only and blended courses, we have thus far provided only a few example components of foreign language classes at a distance. We will now turn our attention to the cornerstones of an effective foreign language program so that we can ultimately plan the ideal distance language course.

Input

Input is essential for second language acquisition. If learners are not exposed to language, they will not be able to learn a language. Even when theorists disagree about exactly how a language is learned, they all maintain that without a wide variety of input, students will not acquire a second language. Input provides positive evidence of the correct formulations of the language so that learners can form hypotheses about how it works^{xvi}. Therefore, any effective language learning program will expose students to target language discourse in a variety of ways (from the instructor, from native speakers or other speakers of the language, from other students, from outside media, etc.)

However, not all input can be processed, and authentic input may be too complex for learners, especially at the lower levels. In order to facilitate instructed SLA, several researchers have proposed modifications of L2 discourse in order to make it “comprehensible input”^{xvii}. This does not mean, though, that input should be simplified and deprived of important

pragmalinguistic meaning to become comprehensible. Empirical evidence reveals that input which has been elaborated (i.e., expanded to clarify potentially troublesome structures) is more beneficial for learners than simplification^{xviii}. In addition, input enhancement (i.e., input that has been made more salient for learners through highlighting or other emphasis) has been shown, in some cases, to improve learner noticing of target language forms^{xix}.⁶ Well-designed foreign language programs provide students with a variety of comprehensible input modified and enhanced to facilitate acquisition so that they can benefit from authentic discourse tailored to their developmental levels.

Output/Interaction

Input is important for acquisition, but learners also need to produce the language themselves. The importance of having opportunities to produce *pushed output* for language acquisition was proposed by Swain (1985, 1995) and Swain and Lapkin (1995, 1998) and illustrated by the studies they conducted in French immersion programs in Canada. Their work revealed that second language learners were unable to attain target-like competence despite many hours of exposure to multiple and rich forms of input. Swain and Lapkin concluded that learners must use language in order to acquire it because through production learners test and correct their hypotheses about how the language works and develop automaticity^{xx}. Empirical evidence has also shown that when all treatments are equal, learners acquire language more quickly when they are pushed to produce it^{xxi}.

In order to produce output, students must interact in the target language. The Interaction Hypothesis^{xxii} states that interactive tasks facilitate second language acquisition because they connect input, attention, and output in a productive way. Through interaction, learners receive negative evidence and feedback, which require them to “negotiate for meaning” and make multiple adjustments to their discourse as they communicate.⁷ It follows then, that a well-designed L2 course would create an environment where students can use the language to communicate and interact with one another, as well as with more advanced target language speakers, as much as possible.

Feedback

Input and interaction, while necessary, are not enough for acquisition. Learners also require feedback on their emerging language systems. Some feedback naturally occurs during the course of communication with native speakers, but research has shown that targeted negative feedback is also beneficial. Feedback is usually reactive in nature (it occurs after an error), although it can also be preemptively given before an error occurs, which sometimes happens in classroom settings. Reactive feedback can be explicit (e.g., an overt correction) or implicit (e.g., a reformulation of an incorrect statement). The main dilemma for language teachers is when and how to provide these corrections.

As we have discussed, communication and interaction are central to language acquisition; however, when an instructor makes an overt correction, the focus is shifted to language-as-object, which is detrimental to communication because the focus of the interaction becomes form rather than meaning. Focus on Form^{xxiii} (FoF) is a theory of when to provide feedback that reconciles linguistic accuracy with conversational fluency^{xxiv}. The premise is that for error correction to be effective, students’ attention should be shifted to linguistic form after they are already engaged in meaning, and not before. That is, learners’ attention should be drawn to an error when necessary for communication. Following this pedagogic approach, feedback is provided for the students when it is necessary for the students to complete their communicative tasks. This means that instructors cannot predict the exact moment when feedback will be necessary; rather, they provide corrections as learners are ready for them. This approach resolves the question of *when* to provide feedback (when it is necessary for communication). The answer to the question of *how* depends greatly on the type of activity, the size of the class, and the pedagogical approach of the teacher.

One method of implementing FoF is through the provision of recasts, one of the least obtrusive forms of corrective feedback. A recast is the reformulation of an utterance with a grammatical mistake into one that is correct, focusing on continuing the conversation rather than simply correcting an error.⁸ The benefit of recasts is that they do not interrupt the flow of class activities, so they should be included throughout communicative foreign language instruction. When recasts do not seem to be doing the job, and learners continue to make repeated, regular errors that interfere with communication,

⁶ See also Leow 2001 pp. 497 – 499 for a review of previous empirical research of noticing via input enhancement. Page 498 contains a table contrasting 8 empirical studies.

⁷ In addition, Vygotskian sociocultural approaches to SLA emphasize the importance of interaction, claiming that knowledge is socially constructed through communication among learners (Lantolf, 2003, 2004).

⁸ Research from child language acquisition suggests recasts as an effective form of feedback for language acquisition (Baker and Nelson, 1984; Farrar 1992).

there is some evidence that a more explicit correction might work.^{9xxv} Under these circumstances, instructors can prompt learners to supply the correct form. Because prompting people for a specific form takes away from the communicative nature of the classroom, instructors should use this method sparingly. However, when students are having trouble identifying an error through a recast, a prompt can provide specific feedback efficiently. Mixing prompts with recasts makes sense because this approach allows an instructor to maintain a focus on meaningful communication, without sacrificing the option to give quick and explicit feedback when necessary.

While recent SLA research has focused on corrections during communicative activities, there is also a need for feedback on written work. Whether or not to provide written feedback on errors is an issue that has been hotly debated (see Ferris 2004); however, empirical research^{xxvi} has shown that corrective feedback on student writing is beneficial. Further, when students are involved in identifying and correcting their own errors, their overall L2 writing skills are more likely to improve. A good foreign language program should provide students with opportunities to revise and correct their own output with instructor assistance and supervision.

Focus on Tasks

Recent approaches to foreign language teaching have relied on the notion of “communicative” instruction. Rather than teaching students language-as-object through grammar drills and translation tasks, classroom activities *involve* students by having them use the language to communicate with one another and the instructor. The use of these communicative activities is based on research from the field of educational psychology suggesting that students are not empty vessels into which to pour knowledge, but rather active beings who learn best by doing^{xxvii}. However, in spite of their communicative nature, language learning activities are often structured to teach specific grammatical concepts, without any rational structure or sequencing. Research in SLA has shown that structuring class activities around a grammatical syllabus is counterproductive because grammar is acquired in accordance with a learner’s “internal syllabus” and not when dictated by a foreign language curriculum. That is, teaching the past hypothetical conditional because it appears on the syllabus will not make learners incorporate it into their target language discourse; they will incorporate it when they are developmentally ready and when it becomes part of their communicative needs.

For these reasons, a task-based approach^{xxviii} to language learning might be the most appropriate way to structure the L2 classroom. Task-based language teaching (TBLT) is a pedagogical theory that proposes using tasks rather than grammatical concepts to organize foreign language classes. Students acquire the structures of the language when they are developmentally ready while completing meaning-focused tasks that have real world applicability. One of the chief methodological principles of TBLT is to complete a needs analysis before designing a course. This way, instructors and course designers can be sure that students are working with tasks they will actually need to be able to do outside of the classroom. In a TBLT course, students learn the language while using it, which provides them with ample opportunity for input and interaction, and their attention can be drawn to form when necessary for communication (through Focus on Form techniques). A well-designed foreign language classroom will allow students to practice completing tasks that transfer to genuine communicative activities out of the classroom (e.g., following directions to a specific location, opening a bank account, making a travel reservation, solving a computer problem by calling technical support, buying groceries at a market, etc.) And many of these tasks can be completed easily at a distance either virtually or through simulations, making the online course a natural environment for TBLT.

CREATING AN EFFECTIVE DISTANCE AND/OR HYBRID FOREIGN LANGUAGE PROGRAM

An online or hybrid foreign language program should be designed to incorporate the principles of an effective L2 language program while at the same time taking advantage of the benefits of technology.¹⁰ There are many practical ways in which an online course (or the online portion of a hybrid course) can provide students with what they need to acquire a second language (see Figure 1 for a synthesis of these principles).

Input

Students working online have the world at their fingertips, with target-language newspapers, magazines, radio shows, television programs, video clips, movies, cartoons, lectures, podcasts, literature, and websites available. However, this

⁹ In their 2006 paper discussing a study which contrasted recasts with more overt oral feedback, Ammar and Spada suggest that while recasts work to some extent, prompts are more likely to result in noticing and learner repair.

¹⁰ See Appendix 1 for a list of technological tools that might be useful when establishing an online foreign language course.

input is not always comprehensible to language learners, and locating it can be difficult. Online foreign language instructors need to provide students with comprehensible input by using technological tools to make authentic input more accessible, having students interact with input as they complete specific tasks, and by linking to level-appropriate content.

Instructors should tailor authentic discourse to make it comprehensible. One of the main advantages of incorporating technology in a language classroom is the ability to use multimedia to adapt materials in the target language to the students' needs and levels. For example, instructors can modify audio and video clips by editing them to add subtitles, repeat certain sections, or insert comprehension questions. These modifications will make the recordings accessible sources of authentic input and cultural content. Along the same lines, instructors can annotate written texts by including glosses (as definitions in the target language, graphics, translations, or a combination) and by editing materials that might otherwise be unwieldy. Using technology to modify authentic texts allows students to benefit from real world materials in ways appropriate for their language abilities.

Instructors should give students specific questions to answer about specific resources. For example, students can complete "Webquests," which are collaborative tasks that require students to look through predetermined websites to find the answers to several questions posed by the instructor. Ideally, Webquests are created to help students develop some cultural or linguistic project (e.g., a group presentation, a poster, or a webpage).¹¹ For example, students could answer questions about current events using newspaper or news clips; get travel-related information by visiting official tourism websites, travel blogs, or reading magazines; compare prices of goods and services using classified ads or online retailers; and learn about popular culture from talk shows and music videos. Different students could have different questions and then they could collaborate to create a poster and presentation for the class. These assignments are interesting and engaging and promote collaboration, solo-work, and exposure to rich input. However, they are extremely time-consuming for instructors because all of the target websites must be pre-screened. This type of up-front development work is common to online courses and is most labor-intensive the first time a distance course is taught. When subsequent versions run, an instructor can simply check to make sure that the websites in the Webquest remain functional and relevant.

Instructors should direct students to use language corpora (written or oral) to investigate linguistic patterns and collocations. Collocations are groups of words that occur frequently together in the target language, and students can investigate these and formulate their own "rules" about how they work. They can then compare these rules in groups and get instructor feedback on their hypotheses. This type of e-learning activity exposes students to real input and allows them to learn about the language as they interact with it. Both written and oral corpora are easy to obtain online; instructors can also create their own corpora based on the genre of language being studied, students' level and curriculum^{xxix}.

Instructors should provide students with links to a wide variety of appropriate supplemental input. A course "webliography" is very helpful for students because it removes the burden of (often unproductive or misdirected) Internet searching and gives students easy access to target language resources to use on their own. Instructors should provide students with links to websites with relevant pedagogical materials (textbook website, language learning websites, language-based games); learning tools (dictionary, thesaurus, verb conjugation tool); authentic materials (popular newspapers, radio stations, websites); and communication tools (chat rooms, blogs, wikis). When instructors provide the materials, students can decide how and when to use them most effectively, supporting a flexible, student-centered approach to learning.

Instructors should create assignments that require students to listen to and understand recorded audio and video. Instructors can create these audio materials for the online classroom and make them increasingly difficult as the semester continues. They should be created for students to complete specific tasks (e.g., take notes on a phone message for a roommate, listen to and write down information about a change of flight schedule, listen to directions and trace a route on a map, listen to an interview and report the key facts to a friend, interpret graphs or charts in a magazine, etc.). Video materials should also be used as less complex version of these tasks since visual clues aid comprehension. Finally, instructors should also use audio and video recordings to provide information about how the course works; that is, class announcements, assignments, and feedback can be provided through audio and video.

Interaction/Output

A distance course might first conjure up images of students working alone, but the truth is that the Internet provides many opportunities for communication not found in a traditional face-to-face classroom. Email, instant messaging, and

¹¹For more information and examples see <http://webquest.org>

chatrooms are some of the most common avenues for communication available today. A distance learning course should take advantage of computer-mediated communication (CMC) and the potential that it has to connect language learners with other learners and fluent speakers of the target language. These interactions can occur synchronously (in secure chat areas or in public chatrooms) as well as asynchronously (via email, bulletin boards, forums and blogs), and they can be through text, audio, or both.

Synchronous CMC (SCMC) is a valuable tool for the online classroom because it promotes a sense of community^{xxx} and helps build relationships^{xxxii}; as we discussed earlier these are both difficult to achieve in a distance classroom and critical to its success. SCMC allows for abundant participation and interaction, especially for those students that are usually shy in a traditional classroom. It is much more efficient in terms of time on task than ordinary classroom discourse and any decrease in teacher-dominated discussions creates more opportunities for the production of more complex language^{xxxiii}. In addition, students using CMC tend to produce language that is lexically and syntactically more complex than that produced in traditional classrooms, and text-based SCMC promotes self-monitoring and self-repair^{xxxiii} because students have more time to prepare and reflect on their responses than they do when they are speaking. In addition, the interaction of learners with native speakers through SCMC has been proven to promote sociopragmatic and pragmalinguistic competence^{xxxiv}.

Instructors should make synchronous and asynchronous communication tools easily accessible. There is a wide variety of tools available for CMC, from free Instant Messenger software to the synchronous and asynchronous messaging pods available in CMS platforms to phone-based VoIP products. Instructors should establish which of these should be used for classroom communication and require students to use them. Ideally, students should be able to access these CMC tools directly from the online classroom or website. It is helpful when students can “see” which of their classmates and instructor is available to communicate via a “buddy list.” Limiting communication to a single set of tools helps maintain order in the virtual classroom and prevents students from losing track of one another when logged into mutually exclusive chat systems (e.g., one student is on Yahoo Messenger while another is using Google Chat).

Instructors should create assignments that require student communication. It is not enough to make CMC tools available for students. In order to have students engaging with one another, communication must be the focus of many assignments. Instructors should assign conversation partners and make sure that there are times when they can “meet” virtually for communicative activities. Students should be given “jigsaw”^{xxxv} or “information gap” activities where each partner has information that the other needs, so they are forced to communicate with one another in the target language. For example, students could be given complimentary copies of a map, with the assignment to work together to complete a route to a specific point. Or students could be given different segments of a video clip of an interview and report the contents of the missing pieces to each other in order to complete the interviewee’s job application.

Instructors should require students to use the target language when engaged in any form of CMC. This is one of the main advantages of the use of CMC in the language classroom because it gives students significantly more opportunities to communicate than are available in a face-to-face classroom. In addition to requiring target language discourse, instructors should address possible cross-cultural differences, as well as rules of “netiquette” to ensure that the communication is effective, smooth and long-lasting. In telecollaboration between two cultures, a group of students may be offended by the directness of the other group (e.g., blunt questions, personal questions, or the use of capitals for emphasis in their messages (which in SCMC is seen as “shouting,” and considered rude)). A class assignment could be to explore these differences, which would help students become more culturally aware in their communication.

Instructors should arrange for students to communicate with more fluent speakers of the target language. By establishing collaborative projects with native and other speakers of the language, instructors give students opportunities to engage in meaningful activities designed to maximize learning. Through these activities (e.g., design a trip, create a web site, prepare a poster/power point presentation on a cultural topic of interest, etc.) students receive rich input from expert speakers and engage in real communication. By negotiating the completion of a project, students need to produce language and compare their production to that of the expert speakers. In addition, in telecollaborative interactions, many instances of feedback and correction are present, for linguistic, pragmatic, and cultural errors.

Instructors can use already established sites of contacts to connect the class with other classes of speakers of the target language. Some useful sites to find telecollaborative projects are: E-pals (www.epals.com/), PenPal World (www.penpalworld.com/), and My Language Exchange (www.mylanguageexchange.com/). Language teachers can also identify online conversation partners within their institutions through other foreign language classes and/or ESL classes. And instructors themselves should serve as these more advanced partners where possible. Some institutions have found that assigning a native or fluent speaker as a teacher’s assistant is helpful in the online classroom where it is difficult for instructors to find enough hours to work one-on-one with students via synchronous chat.

Instructors should have students keep blogs. A blog, literally a “web log,” is an Internet tool that can be used to publish written output. Blogs are especially useful for language instruction--both writing and reading--because they provide a real audience (classmates, parents, other teachers) as well as a sense of authorship and authenticity^{xxxvi}. This in turn motivates students to produce more accurate language. In addition, blogs can be used to provide peer feedback as well as teacher feedback^{xxxvii}, and they can incorporate multimedia. A blog can be used in the online classroom as a reflective tool, much like a journal, for the students to explore their language progress, and it can be used as a forum for the discussion of cultural or language issues. Like other CMC tools, instructors should develop assignments that require the use of blogs (e.g., students could report their use of language outside the classroom and then respond to the blog posts of other students, they could post transcripts of their CMC where the communication seemed to be problematic, and they could use the blogs as portfolios of their group work). Language learners have been found to participate more actively and with greater motivation when provided the opportunity to share their writing online^{xxxviii}.

Instructors should create assignments that require students to make recordings of themselves speaking in the target language. In a face-to-face classroom, it is difficult to give all students time to practice speaking. However, at a distance, instructors can create audio assignments where students complete tasks that require monologic speaking. For example, students can leave “voicemail” messages for specific purposes (for the reservations desk at a hotel, to cancel a restaurant reservation, or to call in sick for work.) Students and instructors can respond to these messages in an asynchronous speech exchange.

Feedback

The online environment lends itself well to feedback because student errors are archived for analysis. In a face-to-face class, conversations are ephemeral—as soon as an error is made it disappears. In an online environment, both synchronous and asynchronous chat is preserved via transcripts, and audio discussions can also be recorded. This ability to save discourse can be a double-edged sword; while it is helpful for post-discussion error analysis, the fact that errors are preserved means that flawed input is continually available for students to review. For this reason, providing feedback as well as giving students time and assignments that require them to analyze and correct their discourse become very important.

Instructors should provide feedback during communicative exchanges. In a way, providing feedback during text-based CMC is straightforward for instructors because they can be sure that students have made an error as they see it in writing. And they can easily provide a recast by re-typing the erroneous utterance in their response to the student. When students do not seem to notice the correction, instructors can use input enhancing technique to direct learner attention to form (e.g., bolding a word, adding color, etc.). Instructors should also provide recasts during audio exchanges.

Instructors should provide feedback after reviewing saved output. Students and instructors in an online classroom spend considerable time creating and posting output. As instructors review these chat transcripts, blog posts, and forum discussions, they can identify patterns in the learners’ interlanguages and tailor assignments and input to focus on form when appropriate for a learner’s developmental level. For example, instructors can direct learners to specific input based on their error patterns, and make certain constructions more salient through input enhancement. In addition, instructors should require learners to review their own archived output. Learners can analyze their own text chat interactions to discover their language learning patterns and correct their linguistic and sociopragmatic mistakes.

Instructors should provide feedback frequently. Because students and instructors can work in online classrooms around the clock, it is important for instructors to provide feedback (both constructive feedback and conversational feedback to acknowledge contributions) frequently. When the instructor maintains an active presence in the classroom, students are more likely to do so as well.

Instructors should use multimedia to provide interactive feedback. Rather than relying on red ink to provide written feedback, instructors can record themselves providing comments on written exercises. This requires students to listen to the recordings, take notes on the comments, and then revise their writing. Instructors can also provide multimedia models so that students can compare their language to that of authentic videos and texts as part of feedback. Using technological tools to make feedback interactive gives students an opportunity to reflect on their language patterns, and recording comments can be a time-saver for instructors who would otherwise need to type written comments.

Instructors should promote peer-feedback. As an important step to creating a community of learning, instructors should encourage students to comment on other students’ work in a critical and constructive way. Depending upon the

language skill level of the learners, students can provide feedback on the other students' blog entries, discussion board contributions, recorded sound files, and videos, commenting both on content and language.

Focus on Tasks

A distance course is the ideal environment for the implementation of a task-based curriculum, which should be designed according to the actual language needs of the students. Learners in a distance/blended environment can access rich, multimodal input, engage individually and collaboratively in communicative activities, and establish relationships with other speakers of the language with whom they can produce meaningful and interactional discourse.

Instructors should design engaging tasks that take advantage of the multimodality of the Internet. Rather than translating pen-and-paper activities to the distance learning environment, instructors should design Internet-based tasks that incorporate audio and video. For example, students could watch a video clip of a cook preparing a dish in the target language (from, for example, a cooking show, which would provide students with rich, authentic input and cultural content). The instructor could modify the video to make it more comprehensible (adding subtitles or key words, repeating difficult parts, shortening unnecessary sections, etc.). After watching the video, students could work collaboratively (or individually) answering self-correcting comprehension questions. Finally, students could create a video of themselves cooking a similar recipe and explaining the steps in the target language, and then upload it to the online classroom for classmate and instructor comment.

Instructors should design tasks that increase in complexity.. Tasks should be designed with the students' levels and needs in mind, and they should increase in complexity as the learner progresses in the language. For example, tasks that incorporate video for listening comprehension are less complex than similar material in an audio format only, since video provides the students with comprehension clues absent from audio activities. Therefore, students should begin by watching videos and then progress to audio-only activities as their skills improve.

The course should incorporate hands-on tasks that are relevant to students' needs. A task-based course should be based on the actual tasks that a learner will need to complete in the target language. Ideally, instructors and course designers should complete a needs analysis to determine what students will have to do in the target language (e.g., travel to a specific location for a study abroad experience, register for classes at a university overseas, answer questions during a job interview, order coffee, etc.). After the tasks have been identified, authentic content should be used wherever possible so that learners use realistic language as they complete tasks (e.g., learners should watch videos of actual job interviews rather than read "dialogues" of interviews created by textbook authors). To illustrate, an interesting exercise is to go to a coffee shop and listen to the beverage order exchanges. Then, find a language textbook which might contain a coffee ordering dialog, and compare the textbook writers' expectations to what actual coffee orders say^{xxxix}.

BEST PRACTICES

Setting up a Successful Online Language Course

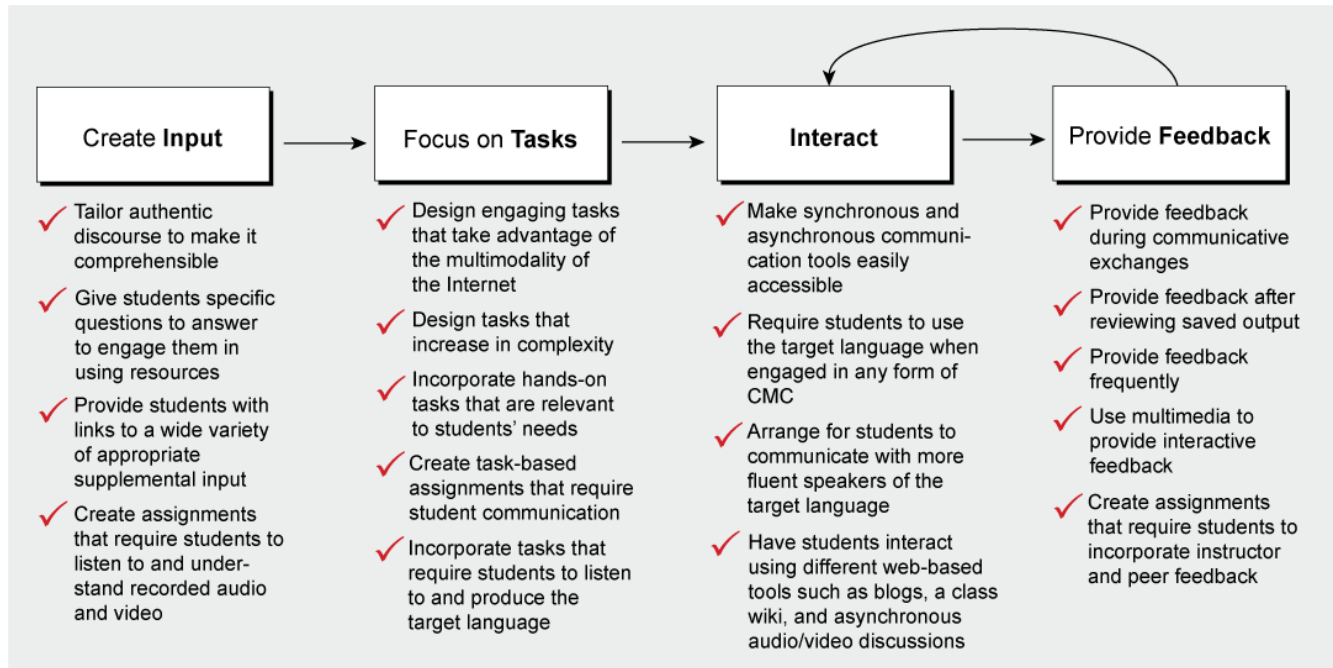


Figure 1

SPECIAL CHALLENGES PRESENTED BY LCTLs

Throughout this paper, we have referred to foreign language teaching in general. However, it is important to remember that each language comes with its own set of challenges—there is no one-size-fits-all solution to online language teaching. We will illustrate some of the language-specific challenges presented by online instruction with a discussion of two LCTLs: Mandarin and Arabic. Online courses for these critical languages are appealing because it is difficult to find qualified instructors for them and because there is often insufficient student interest to justify the expense of offering these courses in a traditional format.

Chinese

Modern Chinese (Mandarin) is a tonal language, which means that many words are differentiated from one another simply by their tones. It is very important for beginning learners of Chinese to have up-front training in tone recognition and production because without tones, Chinese appears to have only 400-plus syllables when in reality the tone system triples this number. Course designers and instructors must make sure that Chinese courses include adequate resources to demonstrate and explain the tone system, and students must have assignments that provide them with feedback on both their comprehension and their production. Authentic listening materials should be modified to emphasize tones so that learners have practice identifying them, and instructors should include activities that require students to record their pronunciation to compare it to a native-speaker model as well as get instructor feedback.

Teaching the Chinese writing system presents challenges regardless of the medium of instruction. First, instructors and course designers must choose which type of script to use: simplified Chinese characters (the official Chinese script of the PRC and the United Nations), traditional Chinese characters (those used outside of Mainland China, especially in Hong Kong and Taiwan), or both simultaneously. Ideally, course designers should consider the future needs of learners before determining which system will be taught, but they should keep in mind that Chinese programs in the U.S. teach some combination of the two. Because Chinese is character-based, the orthography does not systematically make the sounds of words apparent, which is a challenge for learners. Distance students will need access to interactive tutorials that illustrate how the sounds and characters match and how words are parsed. Course designers should plan for a virtual classroom that includes a whiteboard space so that instructors can demonstrate how the script works in real time during synchronous sessions with students.

Learning to write in Chinese is difficult when there is an instructor watching the writing process. At a distance, when any feedback is contingent upon a student scanning and uploading work for instructor comments, learning to form the characters becomes nearly an impossible task. One way around the dilemma of how to teach handwriting at a distance is the use of Romanization or pinyin. Many educators^{xl} have adopted a *penless* approach to Chinese learning,¹² where students type words phonetically and then choose from a selection of characters. Advanced software is able to show tonal markings and pronounce the characters. Not only does this approach spare distance learners the trouble of scanning labor-intensive handwritten assignments for submission, it can also help learners to distinguish characters, improve listening comprehension, and aid in pronunciation^{xli}. Instructors and course designers must make sure that the CMS used for a distance Chinese course can support Chinese characters and that students understand how to type in Chinese characters when interacting via synchronous text chat.

As with many languages, there are few ready-made Mandarin materials or textbooks designed to be used for distance courses. While there is a growing number of Chinese language web resources that could be incorporated into an online language course, from learner blogs to streaming video, there is little quality control on the Internet^{xlii}. Instructors have to spend time previewing the resources for content, accuracy, usability and appropriateness. There are reliable Chinese-English language learning tools (e.g., Wenlin), but they can be costly and therefore difficult to incorporate into an online class.

Arabic

As with many other LCTLs, there is a dearth of Arabic language learning resources^{xliii}. In fact, age-appropriate K-12 learning materials are “practically non-existent.”^{xliiv} College-level programs are similarly plagued by this issue. There are

¹² A criticism of such an approach is that the use of Romanization or pinyin to type is not necessarily a best practice for learning Chinese. If programs do not emphasize the handwriting of characters, learners will be left without the necessary skills to produce Chinese characters on their own.

some e-learning resources available for college-level Arabic, such as those created for the “Arabic without Walls” program, but, in general, instructors who wish to teach online must create their own materials.

Another obstacle for Arabic instructors stems from differences in Arabic dialects. While Modern Standard Arabic (MSA) is used formally in educational and work environments across Arabic-speaking countries, unwritten region or country-specific forms are also used in parallel for informal conversation^{xlv}. Unfortunately, MSA and its colloquial varieties can seem like completely different languages. For this reason, many beginning level courses focus solely on MSA^{xlvi}. However, to be functional in the language, “students must learn two types of Arabic – Classical or Modern Standard Arabic ... and one of the many colloquial forms of the language for informal speaking situations.”^{xlvii} Therefore, instructors must teach more than just MSA, and deciding on which dialect to include can be problematic, as different students will need different dialects depending upon their future plans.

Arabic phonology is very different from English, and learners sometimes have trouble hearing and reproducing the specific sounds, many of which do not exist in English. Because many pronunciations are so foreign to the English tongue, speaking can literally be physically taxing to learners^{xlviii}. For these reasons, Arabic learners might require more pronunciation practice and feedback than learners of a language with sounds closer to English. Online instructors of Arabic need to be especially careful to create communicative activities where students have opportunities to listen to and model native speakers and get instructor feedback on their speaking.

Like Chinese, Arabic uses a non-Roman writing system. Though Arabic has an alphabet (potentially making it easier to learn than a character-based language like Chinese) it nevertheless presents many challenges for its learners. For example, the letters change shape depending upon where they are in a word, so it can be tricky for a novice to understand which letter is which. In addition, words can be written with or without “full vowelizing,” which changes their spelling. Online instructors must make sure that there are adequate resources to explain the writing system as well as to give students practice with learning it.

Finally, there is no simple way for students to learn to handwrite Arabic at a distance. While Romanization is used universally to teach Chinese writing through the computer, this is not the case for Arabic. Arabic students generally learn to form the Arabic letters. Instructors must make sure that the CMS and all other tools for synchronous and asynchronous output can support Arabic script and that students know how to type it. Many email and chat programs do not automatically support Arabic, so instructors must be prepared to handle technical questions from students and have 24-7 technological support available to them. Finally, course designers should include tutorials on handwriting as well as typing, and provide resources (e.g., scanners, face-to-face meetings to review writing) for students to get feedback on their Arabic writing.

CONCLUSION

Deciding to offer an online or hybrid foreign language course is simple; however, actually designing, implementing, and teaching such a course is significantly more time-consuming. First, institutions must make sure they have the technical infrastructure in place for online courses, including an appropriate CMS, technical support, web-development tools, and software for VoIP communication. Course designers must also come up with a plan that integrates technology with the course learning outcomes and identify and/or create e-learning materials. After these materials are created, instructors will need training and mentoring before they are able to teach online for the first time. Finally, “creating a balance of independent, interactive and interdependent course activities takes time, more time than most instructors ever spend on designing their face-to-face courses”^{xlix}.

While online and hybrid courses are not a quick-fix solution to providing language instruction, it is important to remember that these design tasks are up-front costs, and once an online course has been created, each subsequent iteration becomes easier.¹³ In addition, after models of effective online language courses are established, course designers will be able to use them as templates for the creation of future courses, making the process of development far less time-consuming and far more efficient. A system of quality online foreign language courses will provide students with significant advantages (such as, more opportunities to interact with fluent speakers, access to real-world materials, and practice completing target language tasks). In addition, these courses will bring quality language instruction to students who would otherwise not have access to it, which will result in more fluent speakers of more languages.

¹³ See Figure 2 for a graphical depiction of the costs and benefits of online and hybrid language courses.

Costs and Benefits of Online Language Courses

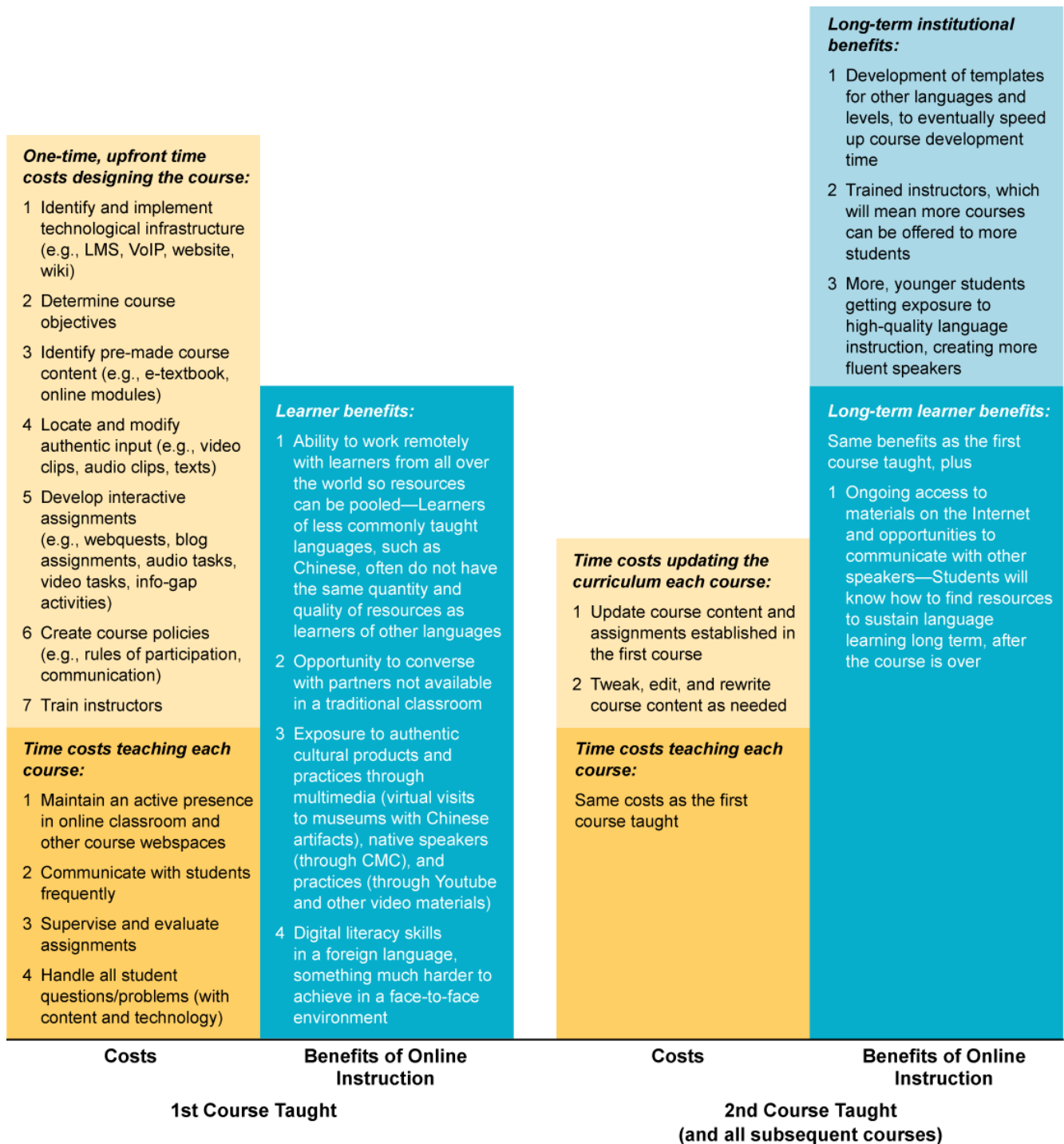


Figure 2

APPENDIX I

Products that might be helpful when establishing an online foreign language class

PRODUCT	COMPANY	WEB ADDRESS
Course Management Systems (CMS)	<ul style="list-style-type: none"> ▪ Moodle ▪ Sakai ▪ Blackboard 	http://moodle.org http://sakaiproject.org/portal http://www.blackboard.com
Voice and/or text computer mediated communication (CMC)	<ul style="list-style-type: none"> ▪ Yahoo Messenger ▪ Skype ▪ PalTalk 	http://messenger.yahoo.com http://www.skype.com http://www.paltalk.com
Web-conferencing software	<ul style="list-style-type: none"> ▪ Wimba ▪ Adobe Connect Pro ▪ Elluminate ▪ Dimdim 	http://www.wimba.com http://www.adobe.com/products/acrobatconnectpro http://www.illuminate.com http://www.dimdim.com
Blogging	<ul style="list-style-type: none"> ▪ Blogger ▪ WordPress 	http://www.blogger.com http://wordpress.com
Wikis	<ul style="list-style-type: none"> ▪ WIKISPACES 	http://www.wikispaces.com
Webquests	<ul style="list-style-type: none"> ▪ WebQuest 	http://webquest.org
Software to create learning objects/course content	<ul style="list-style-type: none"> ▪ Hot Potatoes ▪ Center for Language Education and Research Online tools for audio, video, and interactive worksheets ▪ Virtual Communicator 	http://hotpot.uvic.ca http://clear.msu.edu/clear/store/products.php?product_category=online http://store02.prostores.com/servlet/vcom3dinc/Categories?category=Vcommunicator
Multimedia	<ul style="list-style-type: none"> ▪ Google Earth—Interactive three dimensional maps) ▪ Youtube ▪ Quicktime virtual reality ▪ Artbeats—Royalty free stock footage for the video professional ▪ Audacity to create audio files ▪ Itunes ▪ My podcast ▪ iMovie 	http://earth.google.com http://www.youtube.com http://www.quicktimevirtualreality.com http://www.artbeats.com http://audacity.sourceforge.net http://www.apple.com/itunes/ http://www.mypodcast.com/ http://www.apple.com/support/imovie/

REFERENCES

- (n.d.) Rubric for Online Instruction. (Online), November 29, 2008. <http://www.csuchico.edu/celt/roi/index.shtml>
- Alosh, M. (2001). Learning Language at a Distance: An Arabic Initiative. *Foreign Language Annals*, 34(4), 347-354.
- Ammar, A & Spada, N. (2006). One size fits all? Recasts, prompts, and L2 learning. *Studies in Second Language Acquisition*, 28, 543 – 574.
- Barlett, N. J. D. (2005). A double shot 2% mocha latte, please with whip: Service encounters in two coffee shops and at a coffee cart. In M. Long (Ed.), *Second Language Needs Analysis* (pp. 305-343). Cambridge: Cambridge University Press.
- Baker, N., & Nelson, K. E. (1984). Recasting and related conversational devices for triggering syntactic development in children. *First Language*, 5, 3-22.
- Belz, J. A. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. *Language Learning & Technology*, 7(2), 68-117.
- Belz, J. A., & Kinginger, C. (2003). Discourse Options and the Development of Pragmatic Competence by Classroom Learners of German: The Case of Address Forms. *Language Learning*, 53(4), 591-647.
- Belz, J. A., & Reinhardt, J. (2004). Aspects of advanced foreign language proficiency: internet-mediated German language play." *International Journal of Applied Linguistics*, 14(3), 324-362.
- Berge, Z., & Collins, M. P. (1996). Facilitating interaction in computer mediated computer courses. Retrieved January 18, 2008, from <http://www.emoderators.com/moderators/flcc.html>.
- Blake, R. (2000). Computer-mediated communication: A window on L2 Spanish interlanguage. *Language Learning and Technology*, 4(1), 120-136.
- Bloch, J. (2007). Abdullah's blogging: a generation 1.5 student enters the blogosphere. *Language Learning & Technology*, 11(2), 128-141.
- Bonk, C. & Dennen, V. (2003). Frameworks for Research Design, Benchmarks, Training, and Pedagogy in Web-based Distance Education. In M. Moore & W. Anderson (Eds.), *Handbook of Distance Education* (pp. 331-348). New Jersey: Lawrence Erlbaum Associates, Inc.
- Bourgerie, D. S. (2003, May). Computer Aided Language Learning for Chinese: A Survey and Annotated Bibliography. *Journal of the Chinese Language Teachers Association*, 38(2), 17-47
- Chapelle, A.C. (1998) 'Multimedia call: Lessons to be learned from research on instructed SLA', *Language Learning & Technology* 2: 22–34.
- Chen, H. & Liu, K. (2006). Web-based synchronized multimedia lecture system design for teaching/learning Chinese as second language. *Computers & Education*, 693-702.
- Chun, D. M. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System*, 22, 17-31.
- Darhower, M. L. (2000). *Synchronous computer-mediated communication in the intermediate foreign language class: A sociocultural case study*. Unpublished Dissertation, University of Pittsburgh.
- Dennen, V. P., & Bonk, C. (2007). We'll leave the light on for you: Keeping learners motivated in online courses. In B. Khan (Ed.), *Flexible Learning in an Information Society* (pp. 64-76). Hershey, PA; London: Information Science Publishing.
- Dewey, J. (1998). *Experience and Education: The 60th Anniversary Edition*. Indianapolis, Indiana: Kappa Delta Phi International Honor Society in Education.
- Doughty, C. J., & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7(3), 50-80.
- Doughty, C., & Varela, E. (1998). Communicative focus-on-form. In C. Doughty & J. Williams (Eds.), *Focus-on-form in Second Language Acquisition* (pp. 114-138). Cambridge, MA: Cambridge University Press.
- Doughty, C., & Williams, J. (1998). *Focus on Form in Classroom Second Language Acquisition*. Cambridge, U.K.; New York: Cambridge University Press.
- Ellis, R., Basturkmen, H., & Loewen, S. (2001). Preemptive focus on form in the ESL classroom. *TESOL Quarterly*, 35(3), 407-432.
- Ellis, R., Tanaka, Y., & Yamakazi, A. (1994). Classroom interaction, comprehension and the acquisition of L2 meanings. *Language Learning*, 44, 449 – 491.
- Farrar, M. (1992). Negative evidence and grammatical morpheme acquisition. *Developmental Psychology*, 28(1), 90-98.
- Ferris, D. (2004). The "grammar correction" debate in L2 writing: Where are we, and where do we go from here? (and what do we do in the meantime . . .?). *Journal of Second Language Writing*, 24, 49 – 62.
- Fleming, S., D. Hiple, & Y. Du. (2002). Foreign language distance education: The University of Hawaii Experience. In C. Spreen (Ed.), *New technologies and language learning: issues and options* (Technical Report #25) (pp. 13-54). Honolulu, HI: University of Hawai'i, Second Language Teaching & Curriculum Center.
- Gaskell, D., & Cobb, T. (2004). Can learners use concordance feedback for writing errors? *System*. 32, 301-319.
- Gass, S. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Gass, S. (1998). Apples and oranges: Or, why apples are not oranges and don't need to be: A response to Firth and Wagner. *Modern Language Journal*, 82, 83-90.
- Gass, S. (2003). Input and interaction. In C. Doughty & M. H. Long (Eds.), *Handbook of second language acquisition* (pp. 224-255). New York: Basil Blackwell.
- González-Lloret, M. (2008). Computer-mediated Learning of L2 Pragmatics. In E. A. Soler & A. Martinez-Flor (Eds.), *Investigating Pragmatics in Foreign Language Learning, Teaching and Testing* (pp. 114-132). Clevedon, UK: Multilingual Matters.

- Greenfield, R. (2003). Collaborative e-mail exchange for teaching secondary ESL: A case study in Hong Kong. *Language Learning and Technology*, 7 (1), 46-70.
- Hampel, R. & Stickler, U. (2005). New skills for new classrooms: Training tutors to teach languages online. *Computer Assisted Language Learning*, 18(4), 311 – 326.
- He, W. C. *Teaching Chinese Written Script with a New Computer Approach*. (Online), retrieved October 31, 2008 from http://www.fask.uni-mainz.de/inst/chinesisch/hanzirenzhi_he.htm
- Herrington, J., Oliver, R., & Herrington, A. (2007). Authentic learning on the web: Guidelines for course design. In B. Khan (Ed.), *Flexible Learning in an Information Society* (pp. 26-35). Hershey, PA; London: Information Science Publishing.
- Izumi, S. (2002). Output, input enhancement, and the noticing hypothesis. *Studies in Second Language Acquisition*, 24, 541–577.
- Jeffery, A., Grant, S., Crawford, C., and Lee, K. (2008, September). Teaching Culture and the Culture of Teaching. Paper presented at the Second Life Community Convention, Tampa, FL.
- Kern, R. G. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and characteristics of language production. *The Modern Language Journal*, 79(4), 457-476.
- Kramsch, C., A'Ness, F., & Lam, W. S. E. (2000). Authenticity and authorship in the computer-mediated acquisition of L2 literacy. *Language Learning and Technology*, 4(2), 78-104. (Online), retrieved October 31, 2008 from <http://lt.msu.edu/vol4num2/kramsch/default.html>
- Kubota, M. (2001). Error Correction Strategies Used by Learners of Japanese When Revising a Writing Task. *System*, 29(4), 467-80.
- Lalande, J.F., II (1982). Reducing composition errors: An experiment. *Modern Language Journal*, 66, 140–149.
- Lantolf, J. P. (2002). Sociocultural theory and second language acquisition. In R. B. Kaplan. (Ed.), *The Oxford handbook of applied linguistics*. Oxford ; New York, N.Y.: Oxford University Press.
- Lantolf, J. P. (2004). Sociocultural theory and second and foreign language learning: An overview of sociocultural theory. In K. vanEsch & O. St.John (Eds.), *New Insights into Foreign Language Learning and Teaching*. Frankfurt: Peter Lang.
- Lebow, D., & Wager, W.W. (1994). Authentic activity as a model for appropriate learning activity: Implications for emerging instructional technologies. *Canadian Journal of Educational Communication*, 23(3), 231-244.
- Leow, R. (2001). Do learners notice enhanced forms while interacting with the L2?: An online and offline study of the role of written input enhancement in L2 reading. *Hispania*, 84, 496-509.
- Lixun, W. (2001). Exploring parallel concordancing in English and Chinese. *Language Learning & Technology*, 5(3), 174-184.
- Long, M. H. (1985). A role for instruction in second language acquisition: Task-based language teaching. In Hyltenstam, K., & Pienemann, M. (eds.), *Modeling and assessing second language acquisition* (pp. 77-99). Clevedon: Multilingual Matters.
- Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In K. de Bot, R. B. Ginsberg & C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp. 39-52). Amsterdam: John Benjamins.
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie and T. K. Bhatia (Eds.), *Handbook of language acquisition. Vol. 2: Second language acquisition* (pp. 413-468). New York: Academic.
- Long, M. H. (2007). *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Long, M. H., & Robinson, P. (1998). Focus on form: theory, research, and practice. In C. Doughty & J. Williams (Eds.), *Focus on Form in Classroom Second Language Acquisition* (pp. 15-41). New York: Cambridge University Press.
- Lum, L. (2008). Bringing the Arab world to U.S. classrooms. *Diverse: Issues in Higher Education* 25(2), 24-25.
- MacDonald, J. (2006). *Blended learning and online tutoring : a good practice guide*. Aldershot, England ; Burlington, VT: Gower.
- Moore, M. G. (2005). Editorial: Blended Learning. *American Journal of Distance Education*, 19(3), 129-132.
- Morrison, S. (2003, June). Arabic Language Teaching in the United States. (Online), retrieved January 5, 2009. Center for Applied Linguistics Language Link. <http://www.cal.org/resources/archive/langlink/0603.html>
- Morrison, J.L. & Khan, B.H. (2003). The global e-learning framework: An interview with Badrul Khan. *The Technology Source*. A publication of the Michigan Virtual University. (Online), Retrieved January 21, 2009, from http://technologysource.org/article/global_elearning_framework/
- Oh, S-Y. (2001). Two Types of Input Modification and EFL Reading Comprehension: Simplification Versus Elaboration. *TESOL Quarterly*, 35(1), 69-96.
- Oliver, R. (1995). Negative feedback in child NS-NNS conversation. *Studies in Second Language Acquisition*, 18, 459-481.
- Osguthorpe, R. & Graham, C. (2003). Blended Learning Environments: Definitions and Directions. *The Quarterly Review of Distance Education*, 4(3):227-233.
- Parker, K. & Chaudron, K. (1987). The effects of linguistic simplifications and elaborative modifications on L2 comprehension. *University of Hawaii Working Papers in ESL*, 6, 107-133.
- Pelletieri, J. (2000). Negotiation in cyberspace: The role of chatting in the development of grammatical competence. In M. Warschauer & R. Kern (Eds.), *Network-based language teaching: Concepts and practice* (pp. 59-86). New York: Cambridge University Press.
- Reeves, T. and Reeves, P. (1997). Effective dimensions of interactive learning on the World Wide Web. In B. Kahn (Ed.), *Web-based instruction* (pp. 59–67). Englewood Cliffs, NJ: Educational Technology Publications.
- Reynard, R. (2003). Internet-based ESL for distance adult students – A framework for dynamic language learning. *The Canadian Modern Language Review*, 60(2): 123-142.
- Riesbeck, C. (1996). Case-based teaching and constructivism: Carpenters and tools. In B. G. Wilson (Ed.) *Constructivist learning environments: Case studies in instructional design*, (pp.49-61). Englewood Cliffs, NJ: Educational Technology Publications.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 206-226.
- Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (3 – 32). Cambridge, England: Cambridge University Press.

- Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15, 165-179.
- Shei, C. C., & Pain, H. (2000). An ESL writer's collocation aid. *Computer Assisted language Learning*, 13(2), 167-182.
- Simpson, O. (2000). Supporting students in open and distance learning. London: Kogan Page.
- Skinner, B. & Austin, R. (1999). Computer conferencing: Does it motivate EFL students? *ETL Journal*, 53(4), 270-279.
- Spada, N., & Lightbown, P. M. (1993). Instruction and the development of questions in L2 classrooms. *Studies in Second Language Acquisition*, 15, 205-224.
- Sullivan N., & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System*, 29(4) 491-501.
- Swain, M. (1995). Three functions of output in second language learning. In Cook, G. and Seidelhofer, B. (Eds.) *Principle and Practice in Applied Linguistics: Studies in Honor of H.G. Widdowson*, pp. 125-144. Oxford: Oxford University Press.
- Swain, M. and Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics* 16, 371-391.
- Tudini, V. (2000). Mise au point sur la forme à travers la rétroaction corrective codée et l'auto-correction de l'apprenant dans des tâches écrites. *Rassegna Italiana di Linguistica Applicata*, 32(2), 161-178.
- Tudini, V. (2003). Using native speakers in chat. *Language Learning & Technology*, 7(3) 141-159.
- VanPatten, B., & Cadierno, T. (1993). Input processing and second language acquisition: A role for instruction. *The Modern Language Journal*, 77, 45-57.
- Wagner, M. D. (2006). An Introduction to the Read/Write Web in Education. *Gifted Education Communicator*, 37(2). (Online), Retrieved on January 21, 2009 from <http://leadership.ocde.us/Assets/AB430/Read+Write+Web+Article.pdf>
- Ware, P., & Warschauer, M. (2006). Electronic feedback and second language writing. In K. Hyland & F. Hyland (Eds.), *Feedback and second language writing: Contexts and Issues* (pp. 105-122). Cambridge: Cambridge University Press.
- White, C. (2006). State of the art review article: The distance learning of foreign languages. *Language Teaching*, 39(4), 247-264.
- White, C. (2007b). Innovation and Identity in Distance Language Learning and Teaching. *Innovation in Language Learning and Teaching*, 1(1), 97-110.
- Wilkins, H. (1991). Computer talk: Long-distance conversations by computer. *Written Communication*, 8, 56-78.
- Williams, J., & Evans, J. (1998). What kind of focus and on which forms? In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 139-155). Cambridge: Cambridge University Press.
- Wu, W. (2006). The effect of blog, peer review and teacher feedback on the revisions of EFL writers. *Journal of Education and Foreign Languages and Literature*, 3, 125-138.
- Xie, T. (1998). *Using Computers in Chinese Language Teaching*. (Online), retrieved October 31, 2008, from http://www.csulb.edu/~txie/papers/Using_computers.htm
- Xu, P. & Jen, T. (2005, May). "Penless" Chinese language learning: A computer-assisted approach. *Journal of the Chinese Language Teachers Association*, 40(2), 25-42.
- Yano, Y, Long, M. H., & Ross, R. (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. *Language Learning*, 44, 189-219.
- Yoon, H, & Hirvela, A. (2004). ESL student attitudes toward corpus use in L2 writing. *Journal of Second Language Writing*, 13(4), 257-283.
- Zhang, L. (2004, May). Stepping Carefully into Designing Computer-Assisted Learning Activities. *Journal of the Chinese Teachers Association*, 39(2), 35-48.

Corresponding Author and Reprints:

Katie Nielson, CASL, (301) 226-9171,
knielson@casl.umd.edu, www.casl.umd.edu.

Funding/Support: This material is based upon work supported, in whole or in part, with funding from the United States Government. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the University of Maryland, College Park and/or any agency or entity of the United States Government. The Contracting Officer's Representatives for this project are Mary Ellen Okurowski, PhD, Executive Director, Laboratory for Language Sciences, (301) 226-8817, meokuro@nclcr.gov and Beth Mackey, Language Testing Program Manager, E3 Center for Language, (410) 854-0452, bamacke@nsa.gov

- ⁱ MacDonald, 2006; Simpson, 2000
- ⁱⁱ Doughty & Long, 2003; Ellis, Tanaka, & Yamakazi, 1994; Gass, 1997; Long, 1996
- ⁱⁱⁱ Fleming et al, 2002; White, 2006
- ^{iv} Doughty & Long, 2003; Moore, 2005; Osguthorpe & Graham, 2003
- ^v White, 2006
- ^{vi} Wagner, 2006
- ^{vii} White, 2006; Reynard, 2003;
- ^{viii} Chen & Liu, 2006
- ^{ix} Jeffrey et al, 2008; White, 2006, 2007b; Zhang, L., 2004
- ^x Herrington et al., 2007
- ^{xi} Lebow & Wager, 1994; Reeves & Reeves, 1997; Herrington et al, 2007
- ^{xii} Herrington et al, 2007; Riesbeck, 1996
- ^{xiii} Morrison & Khan, 2003
- ^{xiv} MacDonald, 2006
- ^{xv} Bonk & Dennen, 2003; Dennen & Bonk, 2007; Hampel & Stickler, 2005
- ^{xvi} Doughty & Varela, 1998; Gass, 1998, 2003; Oliver, 1995; Spada & Lightbown, 1993; VanPatten & Cadierno, 1993; Williams & Evans, 1998
- ^{xvii} Gass, 2003
- ^{xviii} Oh, 2001; Parker & Chaudron, 1987; Yano, Long & Ross, 1993
- ^{xix} Chapelle, 1998; Sharwood-Smith, 1993
- ^{xx} Gass, 1997; Swain, 1995
- ^{xxi} Izumi, 2002
- ^{xxii} Long, 1996
- ^{xxiii} Long, 1991
- ^{xxiv} Doughty & Williams, 1998; Long, 1991; Long & Robinson, 1998
- ^{xxv} Long, 2007
- ^{xxvi} Kubota 2001; Lalande, 1982
- ^{xxvii} Dewey, 1998
- ^{xxviii} Long, 1985
- ^{xxix} Ellis, et. al., 2001; Gaskell & Cobb, 2004; Lixun, 2001; Shei & Pain, 2000; Yoon & Hirvela, 2004
- ^{xxx} Darhower, 2000; Skinner & Austin, 1999, Wilkins, 1991
- ^{xxxi} Belz & Reinhardt, 2004
- ^{xxxii} Chun, 1994; Kern, 1995
- ^{xxxiii} Belz & Kinginger, 2003; Pelletier, 2000; Tudini, 2000, 2003
- ^{xxxiv} Belz, 2003; Belz & Kinginger, 2003; Gonzalez-Lloret, 2008
- ^{xxxv} Blake, 2000
- ^{xxxvi} Bloch, 2007; Kramersch 2000
- ^{xxxvii} Wu, 2006
- ^{xxxviii} Greenfield, 2003; Sullivan & Pratt, 1996; Ware & Warschauer, 2006
- ^{xxxix} Bartlett, 2005
- ^{xl} He, n.d.; Xie, 1998; Xu & Jen, 2005
- ^{xli} Xu & Jen, 2005
- ^{xlii} Bourgerie, 2003
- ^{xliiii} Lum, 2008
- ^{xliv} Morrison, 2003
- ^{xlvi} Alish, 2001
- ^{xlvi} Alish, 2001
- ^{xlvii} National Foreign Language Center, n.d. in Morrison, 2003
- ^{xlviii} Morrison, 2003
- ^{xlix} Berge & Collins, 1996