This final chapter provides an annotated bibliography for the volume that highlights many of the major works in CALL over the last four decades. The references listed here have paved the way, support, or otherwise relate to each of the chapters in this volume; they have been identified by the authors of the chapters as among the most important references in that area. We have provided a brief annotation of each reference. These works touch on major theories, functions, environments, learners, tools, and applications related to CALL. While the list is by no means exhaustive, it does offer a diversity of CALL perspectives and provides readers with a springboard for further investigation in the areas addressed in the previous chapters.


Compares the roles adopted by participants in two distinct writing environments: synchronous computer-mediated communication (CMC) and hand-written journals, using a coding based in discourse analysis, social psychology, and sociology. Results show that although a select group of social roles appear in both modalities, participants adopted more varied roles in CMC, some of which did not appear in the hand-written groups.

Reports the results of two replications of a previous study, both of which attempt to examine the relationship between perceived ease of use and usefulness of a specific system and whether or not it will be used.


Investigates how a relationship between negative corrective feedback and the zone of proximal development can promote the acquisition of a second language in adults through a detailed analysis of data gathered from three students.


Examines the use of an L1 in the interaction of adult learners of a second language, more specifically, native speakers of English who are learning Spanish. Results show that use of the L1 can serve the following purposes: establishing and maintaining intersubjectivity, creating scaffolding opportunities, and solving complicated speech situations.


Investigates the changing role of technology in both the social and educational arenas and explores the relationship between emerging technology and new ways of learning. Various suggestions regarding the integration of new technology into the educational environment are also provided.


Compares the relative efficacy of communication based in three differing contexts: face-to-face, synchronous CMC, and email. Results show that students who participate in communication which offers interactivity are the most successful, with strong support for the use of synchronous CMC alone.

Explores the use of the electronic portfolio as an alternative means of assessing student work and offers support for the use of technology in various aspects of the portfolio development.


Examines various issues related to the writing process of noncomposition students through an analysis of the first and final drafts of essays written by a sample of students; focuses mainly on the concepts of feedback and revision.


Describes an early experiment in computer-assisted classroom discussion with a class of intermediate French students, focusing primarily on students’ attitudes and motivation; indicates that such discussions may be beneficial in encouraging discussion among students.


Presents a detailed case study examining the factors involved in the development of intercultural competence with an in-depth analysis of email exchanges between American and German students.


Uses a corpus-based approach to examine the appearance of German modal particles in the speech of both native and nonnative speakers in electronic collaboration and traces the development of each individual learner over a period of 9 months.


Investigates the use of synchronous computer-mediated communication in the negotiation of meaning. Results show that incidental interaction occurs with the use of synchronous CMC, most often with jigsaw tasks, and also support the use of CMC in the promotion of second language acquisition as well as in the examination of interlanguage.
Explores the uses and benefits of CALL in the foreign language classroom, with an emphasis on the creation of pedagogically sound tasks and activities to be carried out collaboratively by students, whether in face-to-face or computer-mediated contexts.

Provides an up-to-date and in-depth discussion of models of second language acquisition as they relate to online learning environments; reviews relevant research and project descriptions to explore the best uses of technology in language learning and teaching.

Presents the argument that in order to maintain an objective view of the mind as a creator of meaning which is constituted of culture, one must reject the current computational view of the mind as nothing more than an information processor.

Uses the *Standards for Foreign Language Learning* as its foundation to explore the challenges related to the integration of cultural information in a language curriculum. A series of four genre-based approaches to expanding the language curriculum are also offered.

Explores various theories of second language acquisition in relation to the use of CALL, suggesting that the development of specific design features and evaluation criteria in CALL related to second language acquisition might improve the conditions conducive to the acquisition of a second language.

Describes the InterCultural Exchange (ICE) project, a collaborative project between students of German in California and students in Germany; discusses the motivation for the project from a constructivist and sociocultural perspective; multiple data sources are triangulated to examine how students create cultural meaning through their computer-mediated interactions.

Offers a selection of strategies that language learners can use in their efforts to both acquire information regarding speech acts and perform them correctly. The article also offers suggestions on where learners might find empirically useful information regarding material about the speech act.


Traces various approaches to distributed cognition back to the beginnings of the discipline of psychology and presents a series of benefits related to using a cultural-historical framework in the study of distributed cognition.


Investigates the relationship between peer response and revisions of essays, using teacher comments and other sources as a basis for comparison. Results show that many of the revisions made by students were not directly related to the suggestions of their peers.


Examines the revisions made by students in response to the written comments of other students and teachers. Results show that students were most successful in revising problems related to composition structure and depth but were less successful in expanding explanation and analysis, indicating that successful comments must consider not only the material to be revised but also the individual differences of the students.


Examines language play on three significant levels: formal, semantic, and pragmatic and investigates the pedagogical role of language play in language teaching.


Examines the burgeoning interest in Vygotskian theory in the academic arena, as well as the pedagogical implications of relevant concepts. The author explores various ways in which this theory has been expanded into both teaching and learning and offers suggestions on how to further apply such theories in the classroom.

Based within the theoretical frameworks of Vygotskian sociocultural theory and discourse analysis, examines various social interactional features of synchronous computer-mediated communication. The study investigates the use of SCMC by two university Spanish classes over a period of 9 weeks, and results show that learner autonomy and communicative behaviors are higher in the SCMC environment than in the traditional L2 classroom.


Applies Vygotskian concepts to an investigation of the spoken interactions of pairs of students during a peer revision exercise in an L2 classroom.


Reviews the potential uses of gaming to encourage learning in immersive worlds through a detailed literature review, an analysis of several case studies, and a series of interviews with experts in the field. Offers information to educators who are considering the use of simulation and gaming in their instructional practices.


Explores the use of asynchronous CMC in creating collaborative learning environments for distance education students. Results show that students who take part in distance education courses react positively to collaborative learning opportunities.


Explores the use of collaborative online tools in the traditional or virtual classroom with an emphasis on those which can potentially promote the skills of reading and writing. Various social-networking tools and platforms are discussed, and two web-publishing projects are examined.

Argues that second language interaction needs to be studied not from the perspective of only whether or not a message is successfully conveyed, but also taking into account the social setting in which learners interact; part of a volume applying Vygotskian approach to second language learning, teaching, and research.


Explores the emerging use of RSS for syndicating content on the internet and applies related theories and practices to the arena of online education.


Reviews the uses of the blog as a technological tool in education and explores its potential use in the language classroom. Two foreign language blog projects are detailed.


Explores the potential for the educational use of blogs, wikis, and RSS feeds, and offers a series of suggestions on how to best integrate such tools into the learning environment.


Consists of a series of investigations from a variety of disciplines, all of which attempt to examine work activity from nontraditional perspectives. The authors do not take into consideration the psychology or sociology of cognition or communication and place a strong emphasis on the bonds between theory and practice.


Offers a compilation of work from various authors examining the central issues surrounding activity theory, as well as an investigation of how it relates to language acquisition and development, education, and therapy.

Reports on a student wiki project; discusses project design, student processes, and outcomes of the project.


Investigates the use of five important technological tools in multicultural education. Research regarding the effective use of such tools, ways to improve and introduce the tools, and their potential advantages and disadvantages is also presented.


Investigates the use of chatbots in offering foreign language students more opportunities to use the target language. Results show that students enjoy using the chatbots and generally find the work with the chatbots to be more rewarding than speaking with other students or teachers.


Applies a sociocultural approach to the use of computer-mediated activities in language learning and to the research, design, and implantation of related materials. Several key issues which must be addressed during design of CALL tasks are also discussed.


Explores the relationship between second language acquisition and experiential learning which occurs through simulation and gaming. Theories and practices related to the acquisition of a foreign language, such as task-based learning, interaction, and comprehensible input, are used to evaluate certain methodologies of simulation and gaming.


Examines the instructional potential of certain gaming methods, focusing on the following three aspects: gaming features of interest to instructors, user behaviors that indicate engagement in gaming, and the potential for achieving particular learning outcomes.

Examines the roles adopted by participants in a writing activity, each working within his/her own zone of proximal development. Results show that while each participant took on differing roles in different stages of development, each one performed an active role in the revision process, indicating that scaffolding in the L2 may be mutual.


Adopts a sociocultural approach connecting theory and practice; offers a comprehensive review of all design aspects surrounding the development of foreign language programs at the elementary, middle, and high school levels.


Examines the reaction of students to expert suggestions concerning their writing through the analysis of both qualitative and quantitative data. Results show that the main factor affecting the way students react to suggestions for revision is instructional practice.


Explores the application of activity theory to the creation of assessments and objectives within a constructivist learning environment. A specific model for using the activity theory framework within constructivist learning environments is also discussed.


Examines the notion and construct of Web 2.0 through interviews with leading developers, communicators, engineers, bloggers, and many others involved in Web 2.0 tools, applications, and development; provides an array of unique perspectives on where the web is now and where it is headed in the future.


Explores the relationship between the use of multimedia annotations and advances in listening comprehension in a second language. Student views concerning the efficacy of multimedia annotations, both visual and verbal, are also included.

Discusses various issues surrounding the application of activity theory to the topic of human-computer interaction, including an analysis of the activity theory, as well as its implications and impact in the field of computer study and design.


Offers support for the use of focus discipline research in the development of multiliteracies; details a classroom-based study in which ESL students participated in a sustained content study through the use of collaborative learning communities.


Argues that foreign language programs must include a literacy component and includes a series of pedagogical approaches which include the use of modern media texts in the development of a curriculum.


Investigates the use of computer-mediated tasks in supporting the following two aspects of communicative language teaching: authentic input and learner authorship. The two specific tasks examined are the creation of a multimedia CD-ROM by adult learners of Spanish and the use of synchronous computer-mediated communication (chat) by a Chinese learner of English.


Provides an introduction to the field of mobile learning. Explains the technologies involved (e.g., primarily handheld computers, smartphones, PDAs, etc.) and their applications. Discusses the effects of mobile learning on pedagogical and social practice based on pilot studies. Emphasizes issues of usability, accessibility, evaluation, and effectiveness.

Offers an overview of the current frameworks for research in human-computer interaction and explores the possible use of activity theory as an alternative framework for designing research.


Introduces the application of Vygotskian sociocultural theory to academic and mental development. Examines research being conducted on the learning of second languages from a sociocultural perspective. Topics covered include learning and teaching languages in the zone of proximal development, L1 mediation in the acquisition of L2 grammar, and sociocultural theory as a theory of second language learning.


Integrates research and theory on the learning of foreign languages through the perspective of sociocultural and activity theory. Describes the use of activity theory to support pragmatic and conceptual innovations in second language learning and education.


Showcases articles that extend the reach of Vygotskian ideas to second language research. Chapters focus on three specific areas of theory: zone of proximal development, inner and private speech, and activity theory.


Examines the use of play in language acquisition by language learners in a Spanish classroom. Stresses that playing serves an integral role in cognitive development of learners by allowing them to interact with language that is slightly beyond their current level of competence.


A different approach to human cognition research, focusing on the role of mathematics in real world applications. Examines the relationship between mathematics, culture, and society.

Proposes the idea of situated learning, that real learning is social and not internal in nature. Central characteristic of learning is a process termed as ‘legitimate peripheral participation,’ which allows an evaluation of crucial relations between participants in a group.


Encourages an assessment of authentic materials used in the classroom sourced from the world wide web by instructors in foreign language education. Faced with the hegemonic presence of the English language and North American culture online, teachers must guide their students to question the authenticity of such materials.


Develops the role of video games in identity development and exploration, which factors heavily in learning. Research shows that massively multiplayer online games increase student motivation and engagement, which in turn can enhance learning.


Proposes global media as an alternative to published mainstream curricula. Students participate in a content course on culture and language but rely on global media to create a long-term simulation that enhances target language and culture assimilation.


Investigates effects of both technology-enhanced and traditional modes of commenting and interaction on types of comments generated by peer reviewers in second language writing. Results indicate that volume of comments, and thus revisions, of the technology-enhanced group was larger than that of the traditional set.

An examination of wikis through the sociocultural perspective, focusing specifically on collective zones of proximal development and sociogenesis. Concludes that wikis hold promise for collective knowledge advancement and language development.


Reports on a study of L2 Spanish students using podcasting to improve pronunciation skills. Finds that the participants enjoyed the podcast project and showed positive attitudes towards achieving native-like pronunciation after participating. Participants also showed some degree of improved pronunciation after the project.


Examines the effect of peer-review training on student revisions of written compositions. Research shows that trained peer-review feedback can impact in a positive way English as a foreign language students’ revision types and their quality of written output.

Murie, R. (1997). Building editing skills: Putting students at the center for the editing process. *New Directions for Teaching and Learning, 70*, 61-68.

Discusses techniques to aid college-level nonnative English-speaking students understand the tools and processes of editing. Focuses on student-centered editing.


Explores the experience of 23 French second-language learners with an interactive video program. Proposes areas for further research, such as the use of narrative as a pedagogic tool, and the differences between natural and technologically simulated language-learning environments.


Examines the role of activity theory in human-computer interaction. Activity theory focuses on practice, just as HCI research has focused on pragmatic issues of design and evaluation.

Presents a new approach to literacy pedagogy known as “multiliteracies,” defined as the multiplicity of communication channels and increasing linguistic and cultural diversity in the world. Proposes a multiliteracy approach to language instruction to maximize linguistic gains.


An observation of the revision strategies of five students enrolled in a 1-semester intensive intermediate French course. Results indicate that self-reported good writers as well as poor writers heavily revised their material, with most revisions coming as surface-level changes as opposed to changes in content.


Explores the complexities and problems of employing new technology in an advanced foreign language course. Additionally, the implications of learning culture via technological services and devices are examined, suggesting that real learning can occur through a structured foreign language learning environment as well as appropriate learning theories.


Video discusses the use of Twitter in education and challenges the existence of university institution and classroom walls. Suggests that the use of Twitter breaks down the walls by connecting what goes on in the institution with episodes in real life.


Examines the usage of Twitter and similar technologies in the classroom environment, especially through the usage of cell phones and other mobile-assisted language-learning devices.


Examines the academic quality of written production achieved with frontal and online collaborative methods. Results examined with an instrument known as the Cognitive Level and Quality Writing Assessment. Collaboration among learners with the online method proves to be of a higher quality than that of the frontal method.

Attempts to quantify the effects of peer and teacher feedback on student writing in the ESL context. Shows that peer and teacher feedback lead to revisions of substance and that multiple drafts result in overall essay improvement.


Study examines the hypothesis that synchronous computer-mediated communication can indirectly improve L2 oral proficiency by mimicking spontaneous conversational speech. Students participating in synchronous computer-mediated communication scored higher on oral proficiency than the control group.


Challenges notion of solitary intelligence, instead pushing for a collective aggregate of intelligence. States that intelligence is indeed accomplished rather than possessed as demonstrated by activity.


Discusses the social and technological dimensions of scaffolding and related concepts in education and learning. Review of articles relating to the same field.


An empirical study comparing three measures of linguistic accuracy. Study focuses on English as a second language students and aims to provide a resource for further research in the area.


Examines the use of information and communication technologies (ICTs) in teaching and learning. Encourages the adoption of active learning add-ons in web environments such as Blackboard and Web-CT.

Provides a comprehensive guide on the origins, uses, and applications of RSS feeds. Examines the possibility of employing RSS in the classroom.


Discusses the variety of language-learning resources freely available in the form of podcasts. Provides a taxonomy of podcast resources and reviews materials in the light of second language acquisition theories, as well as outlines directions for future research.


Describes research-based podcast applications for learning in universities in the United Kingdom, Australia, and South Africa. Most of the reported research comes from the IMPALA project, although other studies are reviewed as well. Also offers suggestions and guidance for the development of podcast projects in education.


Reports on a project in which university language students used iPods as minilanguage labs. Found positive results in terms of student use and benefits.


Examines the change in perception of technology, from being a tool to being a new environment for language learning. Discusses the possibility of a match between learner autonomy theory and virtual reality research. Virtual reality therefore can be a learner-centered environment for second language acquisition.


Discusses a theoretical framework for the development of electronic literacy. Argues that a network-based language teaching approach requires an evaluation of both the technology and how to teach language. Proposes a communal reflection among researchers, teachers, and students in regards to the usefulness of an electronic medium in language acquisition.

Examines behaviorism, cognitivism, and constructivism as three theories in the context of the educational environment. Identifies drawbacks to each idea in the digital age; suggests a new idea of ‘connectivism’ to cope with new technologies and the globalization of education.


Discusses recent ideas on task-based approaches to pedagogy. Reviews relevant research to date and proposes a framework for the implementation of task-based instruction, including ways to minimize problems and to maximize language-learning goals.


Investigates syntactic complexity and discourse functions in ESL learner output generated through asynchronous and synchronous computer-mediated communication. Both mediums allow for increased learner interaction, collaborative text construction, and the formation of electronic learner communities.


Provides a general overview of emerging trends in educational podcasting. Suggest ways podcasts can be used to support language learning and teaching.


Examines the claim that attention to linguistic processes inhibits the availability of attention for higher level conceptual processing, through the analysis of online revisions made by Dutch high school students. Results show that although revisions to linguistic elements were more frequent in foreign language, there was little evidence that indicated higher level revision processes were inhibited in writing.


Discusses the role of interaction in L2 learning. Applies a social constructivist perspective, arguing that learners must be encouraged to participate in activities that engender collaboration and interaction.

Identifies the view that language proficiency is developed through language use embedded in meaningful contexts and not through simple input alone. Examines discourse competence, which includes cohesion and coherence.


Reviews current trends in the use of mediated communication, focusing primarily on the use of new media in creating meaningful L2 contexts and as a means for creating real-world relevance to in-class uses of the internet. Article reviews a sampling of Web 2.0 technologies.


Analyzes the role of noninstitutional L2 sources in the role of language learning, looking specifically at online gaming. Focuses specifically on digitally mediated communicative practices that are distinct from the formal education context.


Describes the evolution of communication technologies and the consequential transformations in everyday communicative activity as well as the possibilities they offer in foreign and second language pedagogy. Focus is placed on blogs, wikis, podcasting, device-agnostic forms of computer-mediated communication and intelligent computer-assisted language learning.


Analyzes negotiation of meaning in a series of chat conversations between students and native speakers of Japanese in an attempt to categorize the perceived difficulties of communication. Gives nine categories based on the causes of difficulties and makes recommendations for classroom activities aimed at improving chat conversations.

Explores similarities and differences between face-to-face oral interaction and computer mediated chatting. Analyzes the place of synchronous text-based communication tools in language programs. Investigates repair and incorporation of target forms, variety of speech acts, discourse markers and feedback tokens of intermediate Italian learners’ chat discourse.


Explores the effectiveness of native speaker chat rooms and their implications for distance learning for learners of intermediate Italian.


Investigates the impact of peer revision on narration and persuasion in intermediate Spanish-speaking ESL college students’ final written drafts. Finds positive impact of peer revision on students’ potential for effective revision and makes suggestions for its inclusion in the ESL curriculum.


A collection of selected essays by the author. Discusses a dialectical-materialist theory of cognitive development in which the mind can only be understood within the surrounding society. Applies theoretical framework to the development of perception, attention, memory, language, and play and examines its implications in education.


Analyzes the interrelation of thought and language through two experimental studies rooted in a theory of genetic roots of thought and language.


Analyzes the semiotics of Web 2.0 (blogs, wikis, multiplayer games, podcasts, video publishing, social network sites) through audience, authorship, and artifact.

Compares availability of, access to, and use of new technologies in students of low- and high- socioeconomic status in California high schools. Finds differences in social context of computer access and use.


Discusses the nature, functions and dynamics of computer-supported social networks. Explores their growing importance in virtual communities, computer-supported cooperative work, and telework as well as their societal implications.


Explores the role of the writing process in the communicative foreign-language classroom. Makes suggestions for its integration into the curriculum as part of the learning process in the form of writing tasks that require group writing, peer editing, and multiple revisions.


Discusses the use of learning objects to instruction and learning through constructivist theory.


Discusses the kind and level of personality that should be included in software agents so as to be acceptable to a human user (particularly one who may fear technology) and the levels of responsibility and legal attribution for responsibility expected or desired from software agents.


A descriptive study of the efficacy of a new generation of Web 2.0 solutions in education at the Rhode Island School of Design. Among the tools analyzed are blogs, wikis, social networking, and online learning communities.

Explores views and perceptions of technology-enhanced language learning in senior high school students in Taiwan. Finds a general liking for and approval of the method but differing opinions regarding its benefits.


Develops a survey about students’ perceptions and preferences regarding online course delivery. Uses survey to assess the quality of online course delivery by faculty. Finds that students’ needs are met and determines the need to develop a consistent course structure across classes as well as to extend technical support hours.


Relates how one professor used Twitter in his classroom in an attempt to enhance a feeling of community among students. Twenty students were asked to microblog to Twitter several times a week as part of a writing assignment, and most reported that they found the experience to be useful.