

The changing world of English

language teaching

Four examples below show the fundamental changes technology is bringing to ELT even if these changes may not be seen as “transformative” from the view of the critical analyst. From the perspective of the social pragmatist they document the actual conceptual and practical changes affecting English language

teaching because they affect the English language, methods for its study, tasks for language learning, assessment, and research.

1- The English language itself is changing

All languages evolve over time as they are used by a variety of speakers with different needs (Aitchison 2001). As a counter measure to such natural change, standards-setting forces such as dictionaries, writing, publishing, and broadcasting have succeeded in maintaining some standards and resistance to change. One observer of linguistic trends in English, Graddol, notes that the days of the standardization through these means may be gone: “. . .with increasing use of electronic communication much of the social and cultural effect of the stability of print has already been lost, along with central ‘gatekeeping’ agents such as editors and publishers who maintain consistent, standardized forms of language” (2001: 27).

Netspeak

New Inventions

Less gatekeeping

language contact.

2- The study of language

The study of every level of the linguistic system has changed because of technology. At the discourse level, the language of electronic communication creates the impetus for robust theory to help make sense of new registers with their own conventions.

The study of phonology includes methods for **speech recognition and synthesis** that have pushed former limits of knowledge. The study of grammar has been affected dramatically by computer-assisted methods through corpus linguistics, which has changed how grammar is studied as well as who can conduct research on English grammar.

Corpus linguists study language in electronically stored texts through the use of computer programs that search and count **grammatical** features.

3- Tasks for language learning

Technology-mediated L2 learning tasks are discussed more extensively in Chapters 2 and 3, but they are introduced here as comprised of two types of tasks that teachers can construct for their students.

3a. **Computer-mediated communication (CMC)**. One type of task is developed from software for **computer-mediated communication** (such as e-mail or chats),

3b. **Learner-computer interaction**. whereas the other is based on **interactions between the learner and the computer** (such as hypermedia listening or concordancing).

Computer-mediated communication

The software for computer-mediated communication, or “CMC” as it is called, can allow for either **synchronous** or **asynchronous** communication.

Synchronous means that the communication is taking place in real time, so learners might, for example, sit in the computer lab during the course period to read and respond to each other’s messages discussing a story that they have read,

Asynchronous communication allows learners to read/speak and write/hear electronic messages, which are stored on a server to be produced and accessed any-time, so the process of communication can be spread out across hours, days, weeks, or months.

Learner-computer interaction

Other technology-mediated tasks provide controlled opportunities for linguistic input for the learner and interaction with the computer. Interaction occurs as the learner clicks to move forward, or to request additional information such as word definitions or cultural notes about the input (e.g. hypertext and hypermedia).

4- New forms of assessments

Technology-based learning tasks have been seen as an exciting opportunity whereas the idea of developing novel assessment tasks through technology is seen by some as a double-edged sword.

For example, teachers and test takers have always questioned the validity of a test of listening comprehension that requires examinees to listen to lectures and conversations without any visual cues. A listening test delivered by computer can use video or images in the input to examinees, and therefore increase the authenticity of the input relative to situations in which visual information is part of the input.

On the other hand, think of highlighting for reading, or notetaking while listening (not easy)

5- Research on learning

Technology provides a means for capturing a record of the learners' interactions in technology-mediated tasks.

Learner-learner interactions through written communication can be recorded for teachers to examine and use in subsequent teaching (e.g., Pellettieri 2000). For example, a chat conversation that is conducted in writing is available for examination of the ideas and language that have been contributed by the participants.

Applied linguistics & CALL (computer assisted language learning)

Students need to develop an understanding of fundamental issues and concepts in applied linguistics.

Technology-based language teaching and research is not a departure from applied linguistics. It is a continuation – the 21st century version of what applied linguists do.

Teachers need to learn to use computer technology for constructing and implementing materials for teaching and assessing English, and they need to engage in innovative teaching and assessments through the use of technology.

Chapter 2

The potential of technology for language learning

Language learning and instruction

In keeping with the common wisdom suggesting that if you want to learn English, you should go live in a place where English is spoken, many sites for communication among English learners through computer-mediated communication on the Internet offer opportunities for conversation with other English speakers.

Internet immersion is new, but the more traditional forms of immersion for developing second language ability find support from many English language teachers. In many teachers' minds today, principles for explaining why immersion is expected to help develop language ability derive from Krashen's (1982) idea about the value of "comprehensible input," language comprehended without the learner knowing all of the linguistic forms in the message. Surely with all of the material in English on the Internet, any learner can find sufficient comprehensible input for a kind of virtual immersion.

If comprehensible input alone were sufficient for L2 development, much of the computer-using time learners spend might indeed result in L2 development. Indeed, results from experience with the immersion principle suggest that learners who are given a lot of exposure to the target language might develop their ability to comprehend, particularly the spoken language, but this experience is limited in terms of the degree to which it can help the learner to develop grammatical competence and particularly the ability to produce grammatical language. How can instruction help?

Insights from the classroom and materials

Are there any insights that can be gained from classroom language teaching that might help to formulate some methodological principles for developing effective on-line learning tasks?

Insights from theory and research

Focusing on **cognitive and social processes of classroom learning** has directed the attention of researchers to the classroom episode or learning task as a unit of analysis.

The study of cognitive processes has developed hypotheses related to the need for learners to comprehend linguistic input and to notice gaps between their knowledge and the target language.

Motivation is seen as essential for making the cognitive effort to engage the processes of comprehension, which sometimes requires asking for help, and sometimes results in noticing a gap in knowledge.

Gap noticing is also prompted by requiring learners to produce the target language, and it is enhanced when learners have time to plan their production and when they are offered correction.

The study of social processes comes to similar conclusions, but with emphasis on the role of the context in which processes occur. For example, collaboration between learners is seen as a key to development because of the scaffolding provided by an interlocutor during task completion. Other social perspectives point to the importance of the context in constructing the identity of the learner as either a participant with the right to speak, or a marginal person feeling the need to remain silent.

Enhanced input

A central concept in cognitive approaches to SLA is that learners have the opportunity to acquire features of the linguistic input that they are exposed to during the course of reading or listening for meaning. Moreover, the likelihood of learners' acquiring linguistic input increases if their attention is drawn to salient linguistic features (Robinson 1995; Schmidt 1990; Skehan 1998). One way that learners can be directed to notice some aspects of the linguistic input is through explicit "input enhancement"

Table 2.1 Types of enhanced input expected to be beneficial to learners

Input Enhancement	Description
Saliency	Marking a grammatical form on the screen or phonologically through stress
	Repeating a grammatical form or lexical phrase
Modification	Making the input understandable to the learner through any means that gets at the meaning (e.g., images, L1 translation, L2 dictionary definitions, simplification)
Elaboration	Increasing the potential for understanding the input through addition of plausible, grammatical L2 elaborations to the original text (e.g., defining relative clauses)

1- Input saliency

1a- Marked input

Input can be made **salient** by highlighting the structures that the learners are supposed to attend to while they are reading the text.

This principle does not work so neatly for aural input, but it is possible to stress some aspects of the input,

<p>Input without any forms marked:</p> <p>Rabbits like to eat many different types of garden flowers, particularly when the plants are young. People attempt to save their plants by placing substances in the garden that the rabbits do not like. Moth balls, human hair, and marigolds may help to deter hungry rabbits. However, the only certain method is a good fence.</p>	<p>Input with to-complements made salient:</p> <p>Rabbits <u>like</u> to eat many different types of garden flowers, particularly when the plants are young. People <u>attempt to save</u> their plants by placing substances in the garden that the rabbits do not like. Moth balls, human hair, and marigolds may <u>help to deter</u> hungry rabbits. However, the only certain method is a good fence.</p>
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Figure 2.3 Texts with (on the right) and without (on the left) highlighted forms

1b- Repetition

A second way of making input salient is through repetition of the target linguistic forms because input frequency is among the factors that figures prominently in theories of the factors that affect noticing of target language input

<p>Click to hear the <u>underlined</u> words.</p> <p>Rabbits like to eat many different types of garden flowers, particularly when the plants are young. People attempt to save their plants by placing <u>substances</u> in the garden that the rabbits do not like. <u>Moth</u> balls, human hair, and <u>marigolds</u> may help to <u>deter</u> hungry rabbits. However, the only certain method is a good <u>fence</u>.</p>	<p>Choose the best answer based on the text.</p> <p>Rabbits like</p> <ul style="list-style-type: none"> <input type="checkbox"/> young plants <input type="checkbox"/> substances <input type="checkbox"/> marigolds <p>The best way to deter rabbits is with</p> <ul style="list-style-type: none"> <input type="checkbox"/> moth balls <input type="checkbox"/> marigolds <input type="checkbox"/> fences
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Figure 2.4 A task prompting vocabulary repetition

2- Input modification

Input modification refers to the provision of an accessible rendition of the L2 input. In CALL materials, modifications appear as hypertext or hypermedia links that help the learners to comprehend the input.

modifications can be any form of simplification, repetition, clarification, or L1 translation – anything that an interlocutor does during the course of a conversation to clarify meaning in order to continue a conversation (Larsen-Freeman & Long 1991).

<p>On the weekend, Martha liked to stop by to see her father at work where she was greeted by the <u>Dalmatian</u> that lived at the station. Lunch was served at 12:30 every day so she tried to get there in time to eat if she could. But last Saturday, when lunch was served, Martha was not there. Her ...</p>	 <p>On the weekend, Martha liked to stop by to see her father at work where she was greeted by the <u>Dalmatian</u> that lived at the station. Lunch was served at 12:30 every day so she tried to get there in time to eat if she could. But last Saturday, when lunch was served, Martha was not there. Her ...</p>
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Figure 2.7 Before (left) and after (right) the learner clicks on a hypermedia link containing an image depicting the word “Dalmatian”

2a- images

2b- L1 translation

2c- L2 definitions

2d- Simplification

Simplification refers to the modification of a text that changes aspects of the

<p>Original text:</p> <p>To tan or not to tan</p> <p>Two researchers specializing in the psychology of health say they've found a more productive way to wean sun worshipers from catching some rays. They've proven that when you actually show people what ultraviolet (UV) radiation is doing to skin, they have a surprisingly high tendency to settle for the pastier look.</p>	<p>Simplifications:</p> <p>Should people get a tan?</p> <p>Two psychology professors said that they made an important discovery. They found out how to keep people away from the sun. The professors show the people pictures of the effects of the sun on their skin. Then these people choose to stay out of the sun.</p>
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(by Bridget Bailey, *Inside Iowa State*, August 30, 2002)

Figure 2.9 An authentic text (left) and a simplified version (right)

syntax and vocabulary to make it accessible for the learner.

3- Input elaboration

Input elaboration is intended to help learners gain access to the meaning of the text by adding grammatical phrases and clauses such as defining appositives, relative clauses, and restatements.

<p>Original text:</p> <p>To tan or not to tan</p> <p>Two researchers specializing in the psychology of health say they've found a more productive way to wean sun worshipers from catching some rays. They've proven that when you actually show people what ultraviolet (UV) radiation is doing to skin, they have a surprisingly high tendency to settle for the pastier look.</p>	<p>Elaborated text:</p> <p>To get a tan or not to get a tan</p> <p>Two researchers <u>who specialize</u> in the psychology of health say they've found a more productive way to wean, <u>or prevent</u>, sun worshipers from catching some rays, <u>keeping them away from the sun</u>. <u>The researchers have proven that when they actually show people what ultraviolet (UV) radiation is doing to skin, the sun lovers have a surprisingly high tendency to settle for the pastier look rather than getting a tan.</u></p>
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(by Bridget Bailey, *Inside Iowa State*, August 30, 2002)

Figure 2.10 Elaborated input (right) developed from an authentic text (left)

the process of elaboration adds to the input in a way that should help to clarify meaning while maintaining the structural and lexical complexity that provides learners with input for acquisition.

Interaction

Throughout the above discussion of enhanced input in CALL, it was impossible to concentrate solely on the input without raising issues of the manner in which the input is provided to the learners. One of the key features of enhanced input in CALL is that it is almost always provided interactively. The discussion of enhanced input also focused on tasks based on learner-computer interactions.

Interaction in CALL

These three perspectives on the various forms of interaction provide plenty of suggestions for CALL pedagogy, some of which have been the object of investigation in research.

Interpersonal communication

The benefits to be obtained through interaction among learners from the three theoretical perspectives are negotiation of meaning, co-constructing meaning, and prompting learners' attention to form.

Learner-computer interaction

Production in CALL tasks

Technology-mediated tasks afford a wide variety of opportunities for producing comprehensible output or co-constructing meaning. At least three aspects of production theory are useful to consider for CALL pedagogy. First, from a cognitive perspective, the benefits of producing language may be enhanced when learners have the opportunity to plan before speaking or writing. Second, the cognitive view also emphasizes the importance of opportunities to correct linguistic output, which can be prompted by feedback from others or from self-evaluation. Third, the sociocultural perspective suggests the value of the learners' use of the help of the interlocutor to allow for production beyond what the learner could accomplish alone.

Planning

One of the benefits cited for tasks constructed through computer-mediated communication is that learners have the opportunity for planning before producing the language.

Chapter 3

Evaluating language learning

Up to this point, system design has proceeded on the basis of a series of hunches and guesses. For us to put foreign language tutor design on a firmer basis, we will need to have real tests of these hunches. . . The only way to evaluate these various common-sense-based hunches is by detailed evaluation of the instructional effectiveness of the principles being proposed. (MacWhinney 1995: 320–322)

While some developers will probably be satisfied with the idea that software must be constructed on the basis of intuition alone, many more people would agree with MacWhinney that detailed evaluation is needed. But what kind of evaluation?

Making a case for technology

This interest in research about the effectiveness of using a particular software in teaching is shared by some language teachers, administrators responsible for budgeting decisions, and commercial publishers

Research methodology

How does the researcher decide on a methodology? Kern and Warschauer (2000) suggest that research methods are tied to the theoretical approach of CALL, arguing that three basic approaches to CALL can be identified – structural, cognitive, and sociocognitive.

the specific methodology is ultimately guided more strongly by the research questions to be investigated, and therefore the problem of setting up the research depends on what those questions are.

Theory-research links

because the purpose of CALL activities is L2 learning, the most critical questions to be addressed about CALL are the following: What kind of language does the learner engage in during a CALL activity? How good is the language experience in CALL for L2 learning?

Examples of useful CALL research

The examples of research that I find most useful are those that provide some evidence about the design of the software, the learners' use of CALL, or the way that the teacher has organized the task.

Table 3.2 Three approaches to developing useful research questions about CALL

Focus on...	Results	Primarily for
The software	Indicate the most successful software design strategies	Software developers and lab coordinators
The learner	Indicate successful strategies for using software	Teachers and students
The task	Indicate the best ways to structure learning tasks	Teachers

1- Focus on software

- a. Subtitles for listening
- b. Intelligent feedback for grammar

Subtitles for listening

One was the study of an interactive listening task for learners of L2 French, in which Borrás and Lafayette (1994) investigated the effectiveness of optional subtitles as a means of modifying the input. They compared performance on a speaking task of learners who had used the computer-assisted video materials with and without subtitle options. Learners who participated in the subtitle condition had the option of choosing to see subtitles for the aurally-presented French when they had difficulty in comprehending. The control group heard the video under exactly the same conditions but without the subtitle option. Results of the speaking task, which required all learners to address questions about the content of the video, clearly favored the subtitle condition. They concluded that the higher oral communicative performance of the experimental group suggests that “when learning from ‘authentic video’ in a multimedia

environment, having the opportunity to see and control subtitles, as opposed to not having that opportunity, results in both better comprehension and subsequent better use of the foreign language” (Borrás & Lafayette 1994: 70).

Intelligent feedback for grammar

The question was whether a program that offered “intelligent” feedback to learners about their errors would be found to produce better grammatical performance than that of learners who had completed the same instruction but without intelligent feedback.

During the research, an intelligent version and an unintelligent version of the program were provided to an experimental and comparison group respectively, and the learners who received intelligent feedback about their use of particles performed significantly better on both posttests and end-of-semester tests than did those students who had received only an indication of where they had made an error.

2- Focus on the learners

In the second set of examples, researchers focused on how learners work on software and tasks. The need to focus on what learners actually do when they participate in CALL tasks is evident if one considers the potential gaps between the options that the software offers and those that learners actually use, or between what the teacher intends for learners to do compared to what they actually do when they work on a task in or out of the classroom.

a. Looking up words

b. Asking for help

Overall, she found a relationship between improved comprehension and requests of help.

c. Participating in telecollaboration

3- Focus on the learning task

Studies examining the learning task have investigated how a learning task was structured to produce ideal language practice for learners.

a. Web-based listening

b. Text chat as rehearsal

A. Web-based listening

Focusing on a Web-based listening task, the first study investigated incidental vocabulary acquisition (Kon 2002).

Table 3.4 Analysis of input modes and success of acquisition for vocabulary (from Kon 2002: 52)

Mode of presentation	Number of modes	% of words acquired*	Quality of the input for acquisition
Audio-video	1	25	OK
Audio-video & written comprehension questions	2	32	Better
Audio-video & overhead transparency notes	2	39	Better
Audio-video, written comprehension questions, and overhead transparency notes	3	67	The best

* Based on delayed posttest performance

The conclusion was that a Web-based listening activity can facilitate incidental vocabulary acquisition, but that characteristics of the input appear to be related to the likelihood that a word will be acquired – the more modes of presentation the better, as summarized in Table 3.4. This finding is consistent with the principle suggested in Chapter 2 that repetition in the input is beneficial for acquisition of lexical knowledge.

b. Text chat as rehearsal

The third study that was focused on tasks investigated a text chat-based task as a means of increasing students' willingness to communicate through oral language in the classroom (Compton 2002)

The data contain clear indications that some of the learners are benefiting from the opportunity to engage in the text chat before engaging in oral classroom work. This suggests the potential for the text chat used to increase willingness to communicate, but at the same time the individual variation indicates the need to carefully consider the tasks, and the learners' comments to try to see how the task might be improved.

Chapter 4

Investigating learners' use of technology

The previous chapters pointed toward the need to better understand technology as it comes into play for English language learning and teaching. One approach to understanding technology use is to carefully observe learners at work.

After all, what could be more informative for software developers than the moment-by-moment description of how learners chose or failed to choose sections of the material or help options, how they responded to questions, and the length of time they spent on various parts of a multimedia environment. What could be better for a teacher than to be able to observe, reflect on, and respond to the language that learners engaged in during an on-line discussion.

Technology-related process data

The process data that constitute the observable record of learners' work on CALL tasks have been called "working style data – consistent, observable behavior displayed by students as they worked on [computer-based] L2 tasks"

Such records might include the following sequences of interaction: production of an error and receipt of intelligent feedback, a request for and receipt of translation, a linguistic production and a self-correction. These types of sequences can be carried out through language or through a combination of language and mouse clicks; they can be enacted through computer-human interactions or through human-human interactions.

Implementing process research

In all cases, the researcher needs to ask for participants' permission to use their data, in accordance with professional guidelines for working with research participants.

Notation for the data

The process data I discuss in this chapter need to be conceptualized as a sequential record of observable behavior. Each unit of behavior, called a move, can consist of either language or behavior, and can be performed by either the learners or the computer.

Description

Several such methodologies have been suggested and illustrated through research on CALL, in particular, interaction analysis, discourse analysis, and conversation analysis.

1- Interaction analysis

Interaction analysis is used to document the particular moves that the learner makes while working with technology.

The descriptive research question addressed through interaction analysis was “How frequently do learners consult the internal glossary (where they simply click on built-in hyperlinks), and how frequently do they consult the external bilingual dictionary (where they must copy and paste or type words into an online dictionary)?”

2- Discourse analysis

Discourse analysis can refer to a number of different analytic perspectives, but what they should share is a functional description of the linguistic choices and moves that the participants make to construct a text.

Focusing on learners’ use of syntax, Kern (1995) noted students’ lack of concern for correctness, consistent with what had been found outside the classroom, but on the other hand that learners participated enthusiastically relative to their oral classroom participation.

3- Conversation analysis

conversation analysis attempts to capture the language users' utterances and intentions and describe how the language in discourse is used to accomplish communicative intent.

for example, discovered the conversational routines that the learners used to accomplish openings, closings, topic shifts, and cohesion,

Interpretation

a process which involves interpretation of the data in a way that makes them meaningful and useful for research.

a. Inferences about capacities

b. Inferences about tasks

a. Inferences about capacities

Inferences about learners' capacities are made from process data when researchers draw conclusions concerning what the learner knows about the target language including its rules for use and their processes and strategies for using the language.

For example, if the process data in Figure 4.4 were instances of dictionary checking in an electronic text, the capacities responsible might be a mental lexicon lacking the particular words that were checked.

b. Inferences about tasks

The second type of interpretation CALL researchers often wish to make concerns how the task influences learners' interaction.

electronic discussion can be a good environment for fostering use of more formal and complex language

Chapter 5

Advancing applied linguistics

L2 learning tasks

The study of L2 learning tasks

Applied linguists investigating L2 acquisition and teaching conduct research attempting to reveal how and why instruction contributes to development of

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L2 ability. Over the past twenty years an increasingly promising approach to instructional activities and research methods has focused on tasks that learners engage in rather than methods that teachers teach.

tasks must have goals, and that they are carried out through participants' engagement in goal-oriented behavior that relies at least in part on language.

Task evaluation

Three approaches have been used for evaluation of such tasks (-1 outcomes, -2 instances of negotiation of meaning, and -3 three dimensions of proficiency)

1- Outcomes

The first is to assess the learning outcomes of learners who have worked on the tasks (the results of using the task and how it helped learners learn).

2- Negotiation of meaning

The second approach looks for instances of negotiation of meaning in the language of task participants.

The sequence of drawing the learner's attention to a linguistic gap, and then resolving the problem is taken as evidence that input has had the opportunity to be acquired.

3- Three dimensions of proficiency

A third approach for evaluating language tasks is through the criteria of accuracy, complexity, and fluency .

Skehan argues that the goal of task-based instruction should be for learners to develop an effective balance between fluency and accuracy and to become able to increase the complexity of their linguistic production

L2 task description

Regardless of the method of evaluation for tasks, the objective of L2 task research is to describe tasks in such a way that teachers and researchers can choose and develop tasks that can be expected to produce the desired results

Table 5.3 Categories and features for a cognitively-oriented definition of task characteristics

Categories Features	Definitions
Code complexity	Syntactic and lexical complexity/load and variety
Cognitive complexity	The complexity of the topical content
Cognitive familiarity	Familiarity of topic, discourse genre, and task
Cognitive processing	Information organization, amount of “computation” required Clarity and sufficiency of given information
Communicative Stress	Degree of pressure in communication
Time pressure	How quickly the task must be done
Scale	The number of participants and length of texts
Modality	The speaking/writing vs. reading/listening contrasts
Stakes	How important it is to complete the task correctly
Control	Amount of influence participants have on the task

(Skehan 1996; Skehan & Foster 2001)

when they are used in research studies or in class.

Three stages of task based language learning

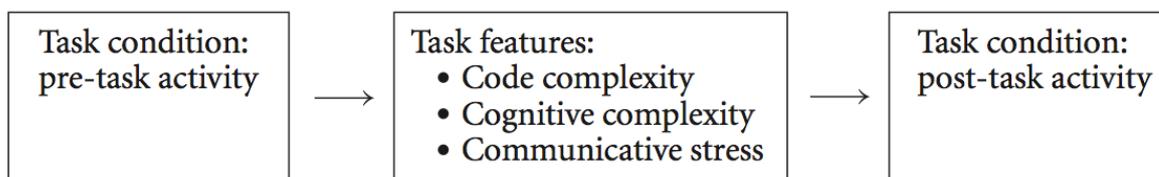


Figure 5.1 A three-part task process

a number of operational issues need to be resolved to move forward.

One is the need to take into account individual differences in the analysis of task-generated language.

A second issue is how to empirically evaluate overall task difficulty.

A third issue is the need to take into account not only the features of the task itself but also the “conditions under which the tasks are done” (Skehan & Foster 2001: 198). “Conditions” here refers to what the learner does before and after the task that may affect the way the task features are operationalized during task performance.

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Lecture notes & Slides in lectures (6-14)