

# Online Video-Based Interaction: A Learning Arrangement for English Language Learning

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## Abstract

Nowadays, a great deal of research has been produced on the effects of an on-line environment on the language teaching and language learning process, where Internet has been quickly and eagerly taken up by educators as both a tool and a medium for foreign language education. The type of teaching delivered in such classrooms is referred to as network-based language teaching (NBLT), and the technologies most commonly used as either non-synchronous communication tools (such as e-mails), or synchronous tools (such as web-based videoconferencing, and chats). For that reason, this article takes a collaboration between Tlemcen University from Algeria and East Carolina University from North Carolina in USA as a case study to discuss the pedagogical implications of video-based communication, such as videoconferencing which distinguishes itself greatly from the other technologies, on foreign language learning.

## Introduction: Videoconference

Videoconferencing technology is a set of interactive telecommunication technologies which allow two or more locations to see and hear each other at the same time via two-way video and audio transmissions simultaneously. This rich communications technology, called also visual collaboration, offers new possibilities for schools and colleges to connect with guest speakers and experts, multi-school project collaboration, professional activities such as meetings and interviews, and community events.

A videoconference system must have audio-visual equipment. This includes: video input (video camera or webcam), video output (computer monitor, television or projector), audio input (microphones), and audio output (usually loudspeakers associated with the display device or telephone). It needs, also, a means of transmitting information between sites (analog or digital telephone network, LAN or Internet).

Among the benefits of a visual connection, is that it is an interactive communication medium. It is almost like being there. The visual connection and interaction among participants enhances understanding and helps participants feel connected to each other. It supports collaboration among traditionally isolated institutions and builds relationships in a way that e-mail, telephone, or online chat systems cannot. The excitement of using new technology and interacting with other students or adults

increases motivation, as students perceive video guests as important and are more conscious of their appearance and oral communication.

Videoconferencing makes, then, a face-to-face visit possible, when a live visit is not. By removing the need for students to travel, yet still providing a two-way audio and video link, videoconference is providing educational opportunities for interactions that would not otherwise exist, saving them time and resources. This allows students to have a greater opportunity to form meaningful relationships with others who may be very different from them. They learn, as well, important communication and management skills, e.g., when they see themselves on screen and realize that is how others see them; this may lead to dress change, posture change, and poise change, all for the positive.

As mentioned in the abstract, this paper takes as example a telecollaboration between Tlemcen University from, Algeria and East Carolina University from North Carolina in USA, in a project called "Global Understanding". It is a world-cultures course taught through virtual classroom where internet is used to allow partner countries from Africa, Asia, Europe and the Americas to have a direct personal experience through real-time videoconferencing, chat, and emails. The link is guaranteed by at least 256K IP regular Internet connectivity, a videoconferencing camera, one internet connected computer with projector, one computer for backchannel communications and coordination, and 8 student computers co-located to classroom for in-class, real-time partner chat.

The emphasis of the course is students' interactions. Each faculty is asked to give a 20-25 minute lecture on its own culture and the rest of the time is spent with students interacting with each other. All students are numbered from 1-16. At the very first class students are given an online pre-course survey and a post-survey in the end of the session. For each link students on each side are divided into two groups. Group A (1-8) from each country will engage in video group discussion, and Group B (9-16) will be in individual chats with their partners. Halfway through the course, students from both groups change places. The topics for each discussion day are: family, college and education, cultural traditions, meaning of life, stereotypes and prejudices. If there are more than 5 links, the two teachers can decide which topic to add.

### **Pedagogical Implications for Videoconferencing Use**

Face-to-face communication would add a realistic element to the process of classroom-based communication. Videoconferencing would prepare learners to employ their skills of interaction *in real time*, which also involves the ability to acquire knowledge about the target culture (Byram, 1997). Using this technology, students will not only be able to interact and to write to their teachers or virtual classmates, but will also be able to hear and see them as well. Yet problems such as the high cost of hardware and software and the poor quality of sound and images have kept the number of language teachers, who have so far experimented with videoconferencing in their classes, very low. More studies should, therefore, add to the isolated reports of videoconferencing that are

beginning to appear in the NBLT (Network-Based Language Teaching) area. It is believed that after identifying what videoconferencing actually involves, the different approaches to implementing the technology in the foreign language classroom will be considered.

In our 'Global Understanding' project, videoconferencing leaves the teacher out of the equation completely and enables students to practice their language skills with native speakers from the target language. Learners involved in such classes can improve their pronunciation, accuracy and fluency in the target language, like those involved in tandem exchanges, between students of French at Monkeaton High School in England and students of EFL (English as a Foreign Language) in a partner school in Lille, France, who conversed every week on a one-to-one basis (Butler & Fawkes, 1999). The students were given access to desktop computers with videoconference capabilities and interacted with a prearranged partner, taking turns to speak in French and English. McAndrew, Foubister, and Mayes (1996) also engaged their English students of French in one-to-one videoconferences, to co-ordinate and prepare presentations and role-plays which they were going to have to perform together at a later date.

In the light of this, we believe that videoconference-based interaction can be particularly beneficial for foreign language learning in the following ways: a) it supports a combination of interaction and reflection; b) it brings about more equal levels of participation between learners; c) it provides an authentic environment for learners; d) it facilitates the collaborative construction of knowledge; and e) it facilitates intercultural contact (Belz, 2001; Crystal, 2001; Warschauer & Kern, 2000). These characteristics will be discussed to show how they may contribute to the development of EFL communicative competence. We will take our 'Global Understanding' project as an example to illustrate how our online conversations generate enough opportunities for our students to produce appropriate language.

### **Interaction and Reflection**

Advances in technology are constantly weakening any theoretical distinction between distance and face-to-face education, where learning is enhanced by the application of technologies and associated teaching and learning strategies. They consider videoconferencing as one technology that has considerable potential for education and training, and is portrayed as equivalent to face-to-face in effectiveness.

McLoughlin (1995), for example, believes that the medium helps to enhance students' sense of involvement, promote dialogue and interaction and foster collaboration between students in remote locations, where (70%) of students in her study regarded the opportunity to interact important and perceived the medium to be interactive. Fulford and Zhang (1993), too, think that interaction is a vital component for effective learning, i.e., when students have the opportunity to interact with one another and their instructors about the content, they have the opportunity to build within themselves and

to communicate a shared meaning to 'make sense' of what they are learning. Some of this can be portrayed in the following chunks of speech, exchanged between our students (referred to as TUA: Tlemcen University of Algeria) and American students (referred to as ECU: East Carolina University) students.

1- TUA#3: Ok ECU#3, are you still practicing basketball?

ECU#3: ...ehhh, I like to play with my friends

2- TUA#2: what about your hobbies?

ECU#2: ehhh... I want to read

...and ..eh.. what else I want to do

... I want to do laundry, I love laundry hehehehe

3- TUA#1: so what are the activities you practice outside, outside your lectures?

...and you didn't tell me what you study

ECU#1: ok ... I study geology

...and geology is the study of rocks and minerals on the earth

4- ECU#13 : alright.

...how do you like the dorms?

TUA#13: eh...isn't good because you are far from your family

... I miss my family

5- TUA#8: do you miss your family?

ECU#8: I do, but at the same time I like to get away of them a little while

6- TUA#12: ((family)) what does it mean to you?

ECU#5: family to me is that comfort zone

7- TUA#8: ok Wes, what are your ambitions?

ECU#8: as right now, complete college, get my education first and then work toward my future

8- TUA#12: how did you find the experience with us?

... Was it useful for you?

ECU#13: yes

... the experience was very useful for all of us I think

9- TUA#3: how do you consider the notion of family in the American society?

ECU#3: yes my mum, my sister, me and my dog

10- ECU#1: do you listen to any music from the united states?

...and if so who do you listen to?

TUA#6: yes of course, we know American music through TV

All the above examples fit into the Question/Answer category exchange. Most of the time these questions were asked to try out different subjects during conversation to discover what topic their partners feel comfortable discussing (Searle, 1969). The answers, on the other hand, give more information as clues to what the interlocutor might want talking about.

Videoconferencing, therefore, allows learners to interact with others and reflect on this interaction at their own pace and in real time, moving then from lower cognitive levels of learning, such as recognition and comprehension, to the higher levels of analysis, synthesis and evaluation (Moore, 1993). It has an important contribution to the style and quality of learning which takes place on-line, where each one can learn from contributions of others and thereby is engaged in an *interactional scaffold* (Peyton, 1999). The students' reflections on their own on-line interactions help to focus students' performances and to make learners more aware of what was required of them (Feldman, Konold, Coulter, Conroy, Hutchison, & London, 2000).

### **Equal Levels of Participation**

Videoconferencing brings about more equal levels of participation between learners than would normally a face-to-face interaction do, with respect to shy and outgoing students, high and low level status groups, and male and female participation (Sproull & Kiesler, 1991; Warschauer, 1996), e.g., students who are shy or who are not confident in using the target language with native speakers are likely to contribute more to on-line intercultural exchanges than in face-to-face scenarios. The social dimension is reduced (Coverdale-Jones, 1998) compared to face-to-face interaction, i.e., groups from different cultures in an online contact will interact on a more 'equal footing' than they might in a face-to-face situation, thereby increasing the potential for an intense and honest process of interaction in which neither group is dominated by the other.

Likewise, Salmon (2000) suggests that thanks to the egalitarian nature of online communication "existing hierarchies and relationships can change and even fade" (p. 19). She means that participants can interact together in ways which they would not want to, or would not be able to, if they were in a face-to-face environment. Through online conversation, opportunities for 'pushed output' to acquire language are maximized with more equal participation than with face to face communication. By

'pushed output' Swain (1985, 1995) denotes pushing learners to produce output that is precise, coherent and appropriate that can induce learners to engage in the kind of bottom-up processing necessary for extending inter-language grammar. There are potentially many ways of 'pushing' learners to produce such output but here we will be concerned with just one – the use of referential questions which require our students to provide information, give an opinion, explain or clarify. This will be illustrated in the following examples:

1) TUA#4: about your question about the activities outside the class organized by our college

... well it depends on the purpose and colleges

... eh but as I know, our university organize eh... concerning sport something eh

2) ECU#4: What..in college what's your grading scheme like?

... what do you have to get to give like an A

... what's the grading like in your college?

TUA#1: we have marks

...from 0 to 20, so if you get 15, it's the best mark

... 15, 16, 17 it's the best

3) ECU#5: you have to graduate high school, with a diploma or a certificate

... and then you have to take a test called the SAT

( ... what about you?)

TUA#8: well in order to go to the college you must first have your baccalaureate exam

... and it's the key to allow you to enter to the university

4) TUA#1: so I'm going to answer your question

... well it exists but very secretly and discretely

... and for me I think that it's an unnatural relationship

... I find it weird and bizarre

In these examples we can see that the questions were nearly all opinion questions. They may have multiple answers, and require a higher level of thinking from our students. Opinion questions are open-ended questions that are ideal for developing

skills such as inferring, predicting, verifying and summarizing, as well as eliciting more language. If we look at our students' performance we can notice that their attempts at target language production will help in the acquisition of new syntactic structures that they struggled to come up with.

### **Authentic Input**

If there is no input, learning will never occur. When it comes to the learning of pragmatics, it becomes even more critical. As Kasper and Schmidt (1996) suggest, by definition pragmatic knowledge is particularly sensitive to the sociocultural features of a context. In foreign language learning contexts, learning occurs almost exclusively in classrooms where many teachers share the same L1 and cultural background as their students, and where only a limited range of social interactions is provided. In an online classroom, on the other hand, learners are exposed to sufficient and adequate input, e.g., more complex discourse organizations, more openings/closings, routines more complex than the typical IRF (Initiation, Response, Feedback) routine, and more discourse and politeness markers (Lörscher, 1986; Lörscher and Schulze, 1988).

Through the examples provided by our online video-based conversations recordings we can see how these types of interactions provide a native-like speaking context. This can be done by looking briefly at the generated conversations and some of the features that contribute to their cohesion. Cohesion helps us to make the difference between just a collection of utterances that do not relate to each other and a discourse that presents unity among the different chunk.

According to Halliday and Hasan's (1976) classification of cohesive devices, there are grammatical cohesive devices and lexical ones. Grammatical cohesion is brought about by the use of grammatical techniques or processes such as reference, substitution, and ellipsis (Moon, 1998). Lexical cohesion, on the other hand, is achieved by the use of repetition, synonyms and lexical chains of topically related items.

As examples of ellipsis, the following chunks will show how these are achieved. What is between brackets represents the missing part:

1-ECU#4: yeah, do you have pizza men?

... do you guys? (do you have pizza men)

2-TUA#8: I'm the partner of Hopkins Wes

... do you hear me ?

ECU#8: yes I do (hear you)

3-TUA#8: why you don't like the dorms?

ECU#8: eh,em not enough privacy, eh, not very nice, not very big so I'm  
struggling to get my own place (I don't like the dorms because)

4-TUA#8: ...do you miss your family?

ECU#8: I do, but at the same time I like to get away of them a little while.

(miss my family)

5-ECU#9: do you? (drink alcohol)

TUA#9: no, no it's forbidden

...it's forbidden in our religion

ECU#9: do you drink alcohol?

6-TUA#14: no it is free, it's free of charge

ECU#14: ok

... not here (it's not free)

7-ECU#5: yes those are the sports we do have

... we also have social organizations for students, as well

TUA#4: yes we do have things like that ('things' is a substitution for social organizations)

From these examples, we can see that ellipsis (omission of elements altogether) and substitution (swapping elements) are used to have the effect that talk is jointly constructed through the successive borrowings from, and additions to, other speakers' previous utterances. It shows that speakers start to know each other quite well and do not need to say every word specifically, i.e., ellipsis is used to create such a close atmosphere. This is the case among friends who have shared meanings and references and it hardly ever happens that the omission of certain elements confuses them.

Studies indicate, as in the case of length of residence in the target community, the length of participation in online links is positively correlated with level of achievement in various areas of pragmatic ability, e.g., conversational routines for pragmatic fluency, acceptance of L2-specific request strategies, decreased verbosity through the use of fewer external modifications, appropriate mapping of speech acts to speech events, and interpretation of conversational implicatures (Blum-Kulka & Olshtain, 1986; Bouton, 1992; House, 1996; Olshtain & Blum-Kulka, 1985). Online settings, then, provide both quantitatively and qualitatively richer input than non-online foreign language learning settings, and learners tend to show gradual convergence to NS pragmatic behavior as their length of participation in online links increases.

Furthermore, educators have begun to recognize the potential of exploiting this characteristic of the video-based links even further. They believe that engaging learners in online discussions with an authentic audience will allow them to express their own



beliefs and opinions and present their own personal representations of their lives and home cultures. Therefore, engaging learners in communication with a real audience about topics which are of relevance to their own lives and cultures holds potentials for intercultural learning, i.e., if learners know that their contributions to the interaction will be taken seriously by an authentic audience, then they may reflect more about themselves and their own culture and how they wish to see this presented to the outside world. In this context Christian (1997) posits that:

There is something compelling for students to be connected to other young people in different locations. Part of it is ...a desire to explain themselves, to make a statement about who they are as they discover themselves. (p. 63)

### **Collaborative Construction of Knowledge**

The online generated interaction is seen as leading to the collaborative construction of meanings and events, by engaging participants in an interactive process which leads to the collaborative construction of knowledge rather than the traditional transfer of information from one to the other. The online discourse can be seen as being highly suited to sociocultural approaches to language learning, as it brings learners to develop an understanding of culture through interaction and collaboration with others rather than simply through the transmission of facts figures about the target language culture by their instructor. Van Lier (1996) calls for a move away from the teacher controlled IRF format of classroom interaction and instead for educators to focus more on a type of classroom interaction which he refers to as *transformation*. The word comes from the Vygotskian belief that higher psychological functions are internalized from social interaction, and *transformation* refers to educationally transforming interaction whose content is determined by the learners themselves or is produced in response to the contributions of others.

Christian (1997) looked at the different types of interaction which occur in online learning environments and tried to identify which are the most suited to developing collaborative learning. He suggests that the value of such interaction happening in an online environment is that students are given an opportunity to discuss their lives and their views with distant partners who will not be so quick to judge and criticize them as their normal classmates might be which is not the case in normal face-to-face discussions. More important is that the generated interactions are co-constructed by both sides, native and nonnative as well. The nonnative learners, faced with their linguistic limitations when venturing new topics, collaboratively with their native partners build up their language through very special instances of help and conversation scaffolding. Through the following examples, we will see evidence of the assistance our learners receive through collaboration or interaction with their English speaking partners.

We will use the assistance steps listed in Table 1, developed by Ohta (2006), to see if the American students were able to assess their Algerian partners' needs, find appropriate assistance, and adjust the source of help if needed.

Table 1 Assistance Steps (adapted from Ohta, 2006, p. 159)

	Other-management
Assess	Helper assesses learner needs
Tailor	Helper provides developmentally appropriate assistance
Adjust	Helper adjusts assistance in response to learner needs
Withdraw	Helper provides less assistance as learner skill grows

ECU#3 : what shall I say, ...ehh. (Assess)

ECU#3: = what do you like to do for fun? (Tailor)

TUA#3: this is just ( )

... KAYLA ...do you hear me?

\* : yeah

TUA#3: what do you suggest?

ECU#3: ... what did she say?

... what do you like to do for FUN

TUA#3: = yes, what d..do you suggest

ECU#3: like..eh...[ reading, or sport] (Adjust)

ECU#3's question, *What do you like to do for fun?*, was tailored and came after erring about what to say, as a sign of a phase of assessment of what type of question that might help her partner. She, then, ended up with an adjustment that includes some examples. ECU#3 was obliged to illustrate with examples, as contextual clues, to help her partner deduce the intended meaning.

ECU#1: ok my question is, what is the popular major at your college? (Assess)  
(Tailor)

... and why do you think it's popular?

TUA#1: popular major?

ECU#1: or what's the course study that a lot of college kids like to study?  
(Adjust)

ECU#1's question was tailored and then adjusted after bumping up with her partner's linguistic limitations. Her adjustment was in the form of a definition of the word major. ECU#1 was even obliged to carry on another adjustment by providing examples:

TUA#1: can you just specify a little

...because we are specialized in studying English as a foreign language

ECU#1: in college do most students study like biology or science, some study like history or business

...what do most kids study? (Re-Adjust)

### **Intercultural Contact**

Culture learning is much more than the collection of information about the high arts, history and institutions of another country, but it is based on a definition of culture which is much more holistic and complex than that. Learners, through videoconference, are engaged in awareness raising activities which will help to develop a more anthropological definition of culture and are encouraged to look beyond a cultural products and practices and look more at the significance which they hold for members of that culture, i.e., learners can develop their critical cultural awareness and look for the values and beliefs which underlie the facts and behavior which they learn about the other culture. This may help in avoiding instances of 'culture clash' as they significantly influence the outcomes of this exchange and the students' attitudes to the target culture. One example of this is the following chunk from our online conversations, where religion was questioned. Though a very critical issue, they could bring it to the table and ask about it.

TUA#8: How do you consider the American Muslims and how do you accept them?

ECU#13: Yeah! I honestly think that there are many people who really, emmm for me personally seeing an American Muslim is just like seeing an American Jew or an American Christian. That's just their faith and it doesn't even really come up as a problem.

Talking about each other's religion and learning how to accept each other's differences is very crucial for socio-cultural competence development. People are very supportive of

their convictions and faiths, so any critical remark may close down any discussion, no matter how linguistically fluent is the interlocutor.

### Conclusion

EFL learners in a network-based language learning environment, to a great extent, pick up not only language and linguistic skills but also cultural awareness. For this reason, it is important that both teachers and learners are made more aware of what online intercultural encounters involve. This can be done, first of all, by providing teachers with workshops which will sensitize them and raise their awareness of what network-based intercultural learning involves and what kind of language environment it affords. Through these workshops they will be trained not only in how to find partners, but also in the other aspects of telecollaboration. Students, too, have to be taught how to engage in online telecollaboration by being exposed to training materials which focus on the skills of cross-cultural research and collaboration.

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