

Computer-assisted assessment in teletandem interactions

Avaliação mediada por computador em interações teletandem

Douglas Altamiro, CONSOLO (UNESP)¹

ABSTRACT

Assessment constitutes an essential dimension of learning and in teletandem interactions inasmuch as it helps interactants to verify indications of language development and the achievement of learning goals. In this paper I review computer-aided assessment (CAA) in foreign language learning with a focus on data from a partnership in the *Teletandem Brazil Project: foreign languages for all*. I draw on the literature on language assessment and CAA, the latter defined as any type of activity in which computers are used to support assessment beyond their functions to store and transmit information. Then I discuss excerpts from a teletandem session, considering occasions in which teletandem interactants evaluate each other's linguistic performances. Assessment in that session is mainly characterized by different types of feedback provided by the most proficient interactant. The less proficient interactant is given feedback based on principles that underpin conversation, distance learning and teletandem, such as the use of technological resources and negotiation about how and when assessment should occur. These principles do not characterise a new paradigm in language assessment, since the conversational and linguistic criteria on which evaluation is based are similar to criteria for assessment in other contexts, for example, in face-to-face lessons.

Keywords: Assessment, CALL, Distance learning, Foreign languages, Teletandem

RESUMO

A avaliação, na aprendizagem de línguas e nas interações em teletandem, auxilia aprendizes/interagentes a verificar indícios de desenvolvimento linguístico, e se objetivos de aprendizagem foram atingidos. Discuto, neste artigo, a avaliação mediada por computadores (AMC) na aprendizagem de línguas estrangeiras, com foco em dados de uma parceria do projeto Teletandem Brasil: línguas estrangeiras para todos. Parto da literatura sobre avaliação em ensino e aprendizagem de línguas e sobre AMC, sendo esta definida como qualquer tipo de atividade nas quais computadores são utilizados para realizar ou apoiar a avaliação além de suas funções primárias de armazenamento e transmissão de informações. Na sequência, discuto excertos de uma interação em teletandem, considerando ocasiões de avaliação de desempenho linguístico entre os interagentes. Nessas interações, a avaliação se caracteriza por diferentes tipos de feedback fornecidos pelo parceiro mais proficiente. A interagente recebe feedback embasado em princípios da conversação, da aprendizagem remota e do teletandem, tais como a utilização de recursos tecnológicos e a negociação de como e quando deve ocorrer a avaliação. Esses princípios não caracterizam um novo paradigma de avaliação em aprendizagem de línguas, pois os critérios linguísticos que regem as ações avaliativas dos

¹ Universidade Estadual Paulista “Júlio de Mesquita Filho” (UNESP), São José do Rio Preto, estado de São Paulo, Brasil. Departamento de Letras Modernas. ORCID: <https://orcid.org/0000-0001-6247-8657>. E-mail: douglas.consolo@unesp.br

interagentes se assemelham aos critérios da avaliação em outros contextos, por exemplo, em aulas presenciais.

Palavras-Chave: *Avaliação, Computador; Educação a Distância, Línguas estrangeiras, Teletandem*

1. Introduction

Assessment is seen as an essential dimension of learning experiences (CONSOLO; GATTOLIN; TEIXEIRA DA SILVA, 2017; SCARAMUCCI, 2000), and it is an important aspect of most formal processes, as well as some informal processes, of language teaching and learning.

Assessment can be seen as the systematic basis for making inferences about the learning and development of students. In its broad sense, assessment is the process of defining, selecting, designing, collecting, analysing, interpreting, and using information to increase students' learning and development. Assessment also refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students.

Assessment is a key component of learning because it helps students learn. When students are able to see how they are doing in a class, for example, they are able to determine whether or not they understand lessons and course materials. Assessment can also help motivate students.

Formative assessment, for example, allows learners to improve in terms of language development and can help to facilitate successful learning experiences. Achievement testing, on the other hand, indicates learning goals reached by means of teaching and learning experiences. Assessment as a process reveals the results of teaching and learning experiences in relation to expected learning aims or proficiency standards.

Given (a) the scope of different types of learning environments available at present – from more standard language classrooms² to distance learning³ – and contexts in which language learning occurs by means of or with the help of computers, and (b) considering that the areas of language assessment and language testing are grounded on various consolidated theoretical principles formulated mainly with regards to standard classrooms, it seems relevant to discuss which principles characterise and underpin computer-aided language assessment and testing. Therefore, motivated to investigate and understand

² In this paper the expressions *standard language lessons* and *standard (language) classroom* refer to classes in which a language teacher and his or her students usually meet face to face, in typical classroom environments. Teaching and learning environments are situated in a physical space, for example, a classroom.

³ Distance learning: Learning processes conducted by means of computer resources, in which students have access to course content and materials produced by the university, college or learning provider. Materials are either sent directly to the student or more usually accessed via the internet. Learning outcomes are supervised online by course teachers or tutors.

electronic language assessment, in this paper I deal with principles and aspects of language assessment in foreign language (FL) learning, more specifically with a focus on CALL⁴ and other contexts in which computers may be used as a means for distance education and for language assessment.⁵

Assessment involves language testing as well as other means and procedures to verify whether language learning has occurred, and also considers possible backwash effects of language assessment on language learning and teaching. Although backwash effects from language assessment and testing have been the subject of attention in the current literature on Applied Linguistics, I do not make explicit reference to those effects here. Some positive effects of assessment are mentioned insofar as they are seen as contributions for language learning.

The advancement of technology has contributed to facilitating language learning and teaching (LINK; LI, 2018). However, there is a lack of knowledge about online language assessment, especially concerning valid measures of proficiency outcomes and how to assess online language learning more effectively (BACHMAN, 2014; LINK; LI, 2018). On the one hand, electronic assessment tools have advantages when compared to paper-and-pencil tests, for example, the use of multimodalities, easier access to data banks, and faster correction and provision of feedback to candidates (CHAPELLE, 1999; CONSOLO; ANCHIETA, 2011).

I draw on the literature on CALL, on language assessment, and on data collected within the scope of the *Teletandem Brazil Project: foreign languages for all* (henceforth TBP),⁶ to support my position on principles that may or may not characterise language assessment in CALL and in teletandem interactions. Besides the claims about CALL from the literature and the support of data from the TBP, represented by teletandem interactions in English, I make brief reference to a type of blended learning environment for EFL – an English language course within the curriculum of a Letters course in Brazil.⁷

In order to explain the meaning of ‘teletandem’, I quote the explanation from the web page of the TBP:⁸

Language learning in tandem involves pairs of native or non-native speakers of different languages working collaboratively to learn each other’s language. Teletandem Brazil matches up Brazilian university students who wish to learn a foreign language, with students in other countries who are learning Portuguese. With tandem language learning, each partner is a student for one hour, learning and practicing a language from the other partner. Then they switch roles and switch languages.

⁴ Computer-Assisted Language Learning.

⁵ An earlier version of this discussion, about assessment in teletandem interactions, was published elsewhere (see CONSOLO, 2020).

⁶ <http://www.teletandembrasil.org/home.asp>

⁷ A four-year undergraduate teacher education course on English Language and Literature, and on Portuguese Language and Literature. EFL is offered as one of the subjects in this Letters course and the students engage in integrated and institutional teletandem sessions as part of their EFL curriculum.

⁸ See footnote 6 above.

Teletandem can thus be defined as a process of cooperative language learning by means of electronic communication. Students at UNESP, a public university in the state of Sao Paulo, in Brazil, have been encouraged to register on the TBP webpage to obtain student partners from universities in other countries where agreements for the project have been established – for example, in Argentina, France, Germany, Italy, Mexico, Sweden and the USA. The students abroad are learners of PFL (Portuguese as a Foreign Language) and the students in Brazil are learners of English, French, German, Italian and Spanish. As stated above, in a partnership, students are expected to help each other learn the languages in which they are proficient users. More recently, students of Letters and graduating in English and Portuguese, are required to engage in teletandem interactions during their EFL class hours, as part of an institutional and integrated version of the TBP.⁹

Interactions in the TBP are grounded on the principle of learner autonomy, that is, language learning is no longer the responsibility of a classroom teacher alone.¹⁰ Learners are responsible for their own process of language learning and this responsibility requires that learners decide on their learning goals, the content of their learning and the resources to be used. In this sense, learners benefit from the possibility of negotiating the aforementioned aspects with their partners; that is, decisions which can contribute (or not) to the success of a collaborative language learning experience.

Reflection is another principle of teletandem and, according to Schön (1983) and Mezirow (1991), reflection may bridge the traditional didactic asymmetry usually found in standard classrooms, in the sense that the student also becomes a ‘teacher’. Moreover, reflection offers the learners the possibility of negotiating the course of the interactions and, as a result, the route of their learning experience.

Reciprocity is a third principle that supports interactions in the TBP, that is, both agents are expected to act as language ‘teachers’ and ‘learners’ so that they can not only experience language development as learners but also learn how to behave as the more proficient partner in one of the languages involved. Based upon language proficiency, on previous experience of foreign language learning and on teaching experience, if that is the case, and on reflection, the most proficient agent is expected to decide on appropriate courses of action to help his or her partner learn a foreign language. These actions involve how the most proficient agent deals with situations in which the learner lacks linguistic competence or any other type of knowledge to express his or her ideas, or when the learner

⁹ For more information on institutional and integrated teletandem sessions, see Cavalari and Aranha (2016).

¹⁰ For more information about the principles in which teletandem interactions are grounded, see Brammerts (2003).

makes language mistakes – given the fact that language mistakes may or may not impede communication.

Teletandem interactions occur by means of online chat, audio or video communication, with the help of communication devices and softwares such as MSN, Skype and Zoom, and generate a corpus of written and spoken data. Focusing on spoken language and for research purposes, oral data has been recorded by means of a software called Easy Recorder, which is available free of charge on the internet. Written data produced in interactions by MSN were also recorded by means of the command to record MSN files.

A full teletandem session usually lasts between one and two hours. Thirty minutes are dedicated to each of the two languages or, in the case of two-hour sessions, one hour is dedicated to each of the two languages used by the agents. In principle each session is comprised of three parts: (a) conversation, (b) feedback on language and (c) evaluation of the session. In the first part of the session the agents engage in a conversation in the target language, about one or more topics, for around thirty minutes (or one hour). In the second part, which takes approximately twenty minutes, the agents discuss the language used in their previous conversation and the most proficiency agent provides linguistic feedback to his or her partner, with the help of notes written during the conversation or, in the case of written communication (chat), by referring to the previous lines of their interaction. The third part of the session lasts around ten minutes and is dedicated to evaluating the whole session, comprising a discussion about the difficulties faced by the participant while interacting in teletandem and suggestions for future actions.

The three parts of a typical teletandem session mentioned above may not be strictly followed by all partnerships, since interactants have autonomy to decide about what to do and how to conduct their sessions.

In the next section I review a theoretical background to foreign language learning and assessment, and in section 3 aspects of computer-aided assessment are reported. I then proceed to a discussion about the issues concerning language assessment in distance learning of languages and teaching (section 4), the data analysis (section 5) and present my position about principles for electronic language assessment.

2. Foreign Language Learning and Assessment

Because this discussion involves two related concepts sometimes used synonymously, but which imply different aspects and dimensions of language teaching and learning, and of assessment and evaluation, definitions must be provided. According to Garrison and Anderson (2003), evaluation refers

to a comparison between course units or programs and some determined criteria for course results. These results may include students' or customers' satisfaction with the course results attained. Assessment refers to the process of critically evaluating students' performance and development towards educational goals, which include language knowledge, language skills and linguistic performance. Language assessment should follow and be aligned with the same concepts and principles chosen as support for a given language learning process, that is, views on what *language*, *language use* and *language learning* mean should be reflected in the criteria to assess language development and effective language use.

Assessment can be more effective when the principles of 'multiplism' (SHOHAMY; INBAR, 2006) are followed. According to the authors, one must be aware of several facets involved in assessing language learning, and of the instruments and procedures available – for example, observations and grids, questionnaires, tasks and tests, to better map out or verify if learning has occurred.

Language assessment, in many circumstances and especially in formal contexts, aims to verify at which level of language proficiency a given learner can be classified. For Stern (1983), language proficiency means the actual performance of a learner in a given language, and it involves the mastery of (a) the forms, (b) the linguistic, cognitive, affective and sociocultural meanings of those forms, (c) the capacity to use the language with a focus principally on communication rather than attention on form, and (d) creativity in language use. Based on this definition one may interpret communicative language ability (or communication by means of language use) as being constituted of two components: linguistic proficiency and communicative proficiency. The concept of proficiency takes into account the real aims of using language in social contexts, for example, in distance learning interactions by means of computers.

3. Computer Aided Assessment (CAA)

Computer-Aided Assessment (henceforth CAA) is defined as any type of activity in which computers are used to support a process of assessment apart from and beyond their simple function to store and transmit information (CARTER; ENGLISH; ALA-MUTKA; DICK; FONE; FULLER; SHEARD, n.d.). CAA helps create faster assessment, increases the quality and quantity of information detected, and maximizes the provision of feedback about language assessment processes.

An essential principle underpinning CAA is that it requires pedagogical bases that are consistent and coherent with the pedagogical principles that support distance learning of languages by means of computers (CARTER, ENGLISH, ALA-MUTKA, DICK, FONE, FULLER; SHEARD, n.d.). Therefore, the principles that illuminate teletandem interactions (autonomy, co-operation, reflection and

reciprocity), as reported in the first section of this paper, also have a role in the scope of principles to support CAA. As stated in section 2, principles that support language learning under any given set of conditions and with regards to clear language learning goals, should support the actions and techniques used in assessing learning, for consistency and coherence between learning and assessment.

The literature on CAA implies some types of questions and procedures that are adequate for formal assessment in electronic contexts. These procedures include multiple-choice questions, textual answers, problem-solving tasks and peer evaluation.

Peer evaluation is especially indicated in situations in which large numbers of students are involved, situations in which computers are very helpful to organize pairs or groups of students to work together. Electronic submission of tasks allows for random distribution in peer assessment, and for answers to be presented to assessors anonymously, that is, respondents' names can easily be omitted. Marks can also be easily stored and compared for consistency. Thus, with the aid of computers, peer assessment can be greatly improved. Finally, peer assessment can also be used for assessing students' evaluation skills, by comparing their assessment to that of their teacher or fellow peers. Assessment in teletandem interactions, as discussed in this paper, falls within the scope of peer evaluation, given the fact that interactants are expected to assess each other's linguistic performances in the sessions.

The data from the TBP reveal that characteristics of language assessment occur in the process of teletandem interactions, that is, while agents are involved in conversations, regardless of the use of any formal instrument to assess or test language performance or levels of language proficiency attained by the agents. Some characteristics of language assessment in teletandem interactions are dealt with in the next section.

4. Language Assessment in Teletandem Interactions

Assessment in teletandem interactions usually occurs within the conversational process, that is, during online interactive sessions between the agents. In some cases, this assessment (a) aims to clarify the message and in other cases (b) the most proficient agent helps his or her partner to learn language items that are relevant to convey meaning. Based on Sinclair and Coulthard's (1992, 1975) IRF structure of moves in classroom interaction (I=Initiation; R=Response; F=Feedback/Follow-Up), when the F move occurs, it is characterized as (a) or (b)¹¹, or it basically indicates acknowledgement of the R move, as usually expected in both classroom and non-classroom communication.

¹¹ In Sinclair and Coulthard's (1992, 1975) IRF frame the F move is most frequently produced by the classroom teacher.

In face-to-face lessons, similarly to the contexts in which Sinclair and Coulthard (1975) conducted their investigations about classroom discourse, the I move is usually produced by the teacher, for example, when s/he asks a question or gives an instruction. The R move refers to a student's (or the students') reply to the teacher's initiation, and the F move is usually the teacher's prerogative as well, when s/he evaluates what was said in the response movement and/or provides feedback on what was said in the R move. For example:

- | | |
|--|--------------------------|
| (1) I1 (teacher, referring to the picture of a city plan): | Where's the post office? |
| R1 (student): | It's opposite the bank. |
| F1 (teacher): | That's correct! |

The feedback provided by the teacher in F1 probably means that the student (a) answered in correct English and that (b) the information about the location of the post office is correct. In classroom communication, F moves about correct language and/or correct information provided by students typically aim at informing students that they have appropriately accomplished participation in interactions with the teacher, that is, by dealing with correct content and by using language correctly. Otherwise, the teacher may intend to signal that something is wrong, as in the next example:

- | | |
|-------------------|--|
| (2) I2 (teacher): | Where's the bank? |
| R2 (student): | It's in front of the post office. |
| F2/I3 (teacher): | I beg your pardon? (<i>OR</i> : In front of the post office?) |
| R3: | Uhm... it's opposite the post office. |
| F3: | That's correct! |

In this example, F2 can also be analysed as another I movement, since it required a R verbal movement from the student (R3). F2/I3 also functions as a type of indirect evaluation of the student's response, indicating that the student's response was not proper or correct. Once the student has produced R3, the teacher provides positive feedback in F3 to reinforce that the student's answer was correct and thus accepted.

Considering that assessment, either as an explicit action or as embedded in F moves in teletandem interactions constitutes feedback, Freschi (2017) studied types of linguistic feedback

provided by most proficient agents to their partners during teletandem sessions. According to Freschi, these language items include mainly grammar and vocabulary.

Goertler, Schenker, Lesosk and Brunsmeier (2018) conducted a study on success in learning through telecollaboration with focus on language outcomes and intercultural competence. The authors state that “The assessment of student learning through telecollaboration is a challenge many instructors face” (p.23). Research participants were university students of an advanced German language course in the USA and pre-service teachers of English at a university of Education in Germany. Various instruments were used to assess learning outcomes, including in-class assignments and class feedback, a role-play similar to those in the ACTFL Oral Proficiency Interview. The authors report that although “students were linguistically able to complete the tasks without major cases of miscommunication during their interactions with their partners” and “clearly enjoyed the telecollaboration and saw it as beneficial”, most of them “fell short of language skill goals and language production goals” (p. 33).

In this discussion I refer to online interactions conducted in English, between Brazilian Portuguese and English-speaking agents,¹² by means of online chat and MSN Messenger, which generated audio and video data for language analysis. The participants were a male university student who studied Portuguese as a foreign language at a university in the USA (NAAg), and a female Brazilian student of a Letters course who had English as one of her course majors¹³ (BrAg). It is important to remember that, in the TBP, each participant in Brazil interacted with a participant abroad by means of MSN in a minimum of eight teletandem sessions of one hour each.

Given the role of grammar in FL learning, as discussed by Brocco (2007) and also by Custódio (2007), data from teletandem interactions in the scope of the TBP have also been analysed and presented elsewhere¹⁴ in order to discuss difficulties faced by agents in the USA, who are the most proficient agents in English, when producing the Portuguese language on particular occasions in which lack of grammar competence disturbed or impeded clear communication.

For an overview of linguistic feedback, the analysis of interactions in Brazilian Portuguese in one of the articles reviewed for this paper shows the types and frequency of linguistic feedback provided to an agent in the USA by a Brazilian agent. Feedback refers to all types of reflection about linguistic items, including grammar, vocabulary, spelling, discourse and phonology. Table 1 presents the frequency of the three types of feedback found in the data analysed by Consolo, Brocco and Custódio (2009):

¹² In this paper, participants in teletandem interactions are referred to as “agents”.

¹³ A BA course in Letters (in Portuguese, *Licenciatura em Letras*) with majors in English and Portuguese.

¹⁴ For example, Brocco (2007), Custódio (2007), Consolo, Brocco and Custódio (2009).

Table 1: Types of linguistic feedback¹⁵

Type of linguistic item	Number of occurrences	Percentage
Grammar	44	28.4%
Vocabulary	78	50.3%
Spelling	8	5.2%
Discourse	21	13.5%
Phonology	4	2.6%
	Total: 155	Total: 100%

The information in Table 1 reveals that most of the linguistic feedback (50.3%) focused on vocabulary, as might be expected. Foreign language learners usually need help in learning new words and when facing a lack of words during the language learning process. The amount of feedback on grammar, the focus of this investigation, was not very high. However, the frequency of feedback on grammar observed (28.4%), together with an overview of the cases of grammar mistakes raised in the corpus, suggests that grammar needs attention in foreign language learning.

Before agents engage in teletandem interactions they receive orientation on some principles that should be followed during the sessions, as mentioned in the introduction to this chapter. One of these principles states that there must be mutual co-operation between agents so that both can benefit from the interactions inasmuch as they can share experiences, knowledge about various subjects, and knowledge about the languages involved.

As for language assessment, it is suggested that agents negotiate how they prefer to be corrected when they make mistakes, for example, “on the spot” or at the end of the session. During the main part of an interaction, agents may take notes on mistakes and linguistic aspects they would like to discuss with their partner later. However, when one of the agents lacks language to express an idea, it is common that his or her partner provides help with vocabulary or grammatical structures. Agents sometimes comment on their partners’ good linguistic abilities.

A difference between formal language instruction in standard classrooms and teletandem interactions might be the fact that, in the latter, when the most proficient agent does not know how to explain a linguistic aspect s/he may say so to his or her partner, and compromise looking for the explanation and bring it for the next session. Similar situations may also happen in standard classrooms,

¹⁵ From Consolo, Brocco and Custódio (2009).

when teachers tell their students they will bring a(n) (better or more detailed) explanation about a teaching point or a student's question in a future lesson.

Feedback may be provided by the most proficient agent when s/he notices formal deviations, lack of vocabulary or pauses in his or her partner's speech that indicate limited language proficiency. In this sense, feedback is associated with language assessment and with corrective techniques that the most proficient interactant chooses to use. Some types of feedback encountered in data from teletandem interactions (ROSSI DOS SANTOS, 2008) are explicit corrections, reformulations (recasting), requests for information and requests for clarification.

5. Teletandem Data Analysis

The eleven examples presented below, in Excerpts 1 to 11, are from one of the teletandem interactions analysed by Rossi dos Santos (2008). The data of the interactions analysed in this paper were collected over a period of three months.

Excerpts 1, 2 and 3 below illustrate cases of requests for clarification:

Excerpt 1

001-NAAg do you have a car?
 002-BrAg no... I/ I drives my father's car
 003-NAAg you do WHAT?
 004-BrAg I/ I drives my FATHER'S car
 005-NAAg oh ((*laugh*))
 006-BrAg ((*laugh*))
 007-NAAg what kind of car is it? (...)

Excerpt 2

008-NAAg uhm... are/ are you a feminist? do you know what that is?
 009-BrAg no... uhum ((*negative answer*))
 010-NAAg no you don't know what it is or no you're not?
 011-BrAg no I'm not a feminist
 012-NAAg [ok

Excerpt 3

013-BrAg yeah there are many woman who don't works
 014-NAAg uhum ((*indicating comprehension*))
 015-BrAg but the numbers of woman who works is increasing
 016-NAAg it is increasing or it is not?
 017-BrAg is increasing

In Excerpt 1, the NAAg might have been in doubt about what the BrAg meant because she used “drives” in turn 002 and made reference to her father (“my father’s car”), which indicates a problem in communication caused by a grammatical mistake. In Excerpt 2 the problem in communication was caused by the fact that it was not clear whether the BrAg’s answer “no”, in turn 009, meant that she is a feminist or that she did not know the meaning of “feminist”. This doubt is clarified in turns 011 and 012. In Excerpt 3, the NAAg seems to be confused by two pieces of information provided by the BrAg that are contrary to each other, “((*in Brazil*)) there are many women who don’t works (*sic*)” and “the numbers of woman (*sic*) who works (*sic*) is increasing”, but the problem may have been caused by the grammatical mistakes.

According to Rossi dos Santos (2008), requests for clarification usually refer to part of a preceding statement and are contingent with a form of pronoun – you, in the case of example 1, for instance, “You do WHAT? – You did what?, You saw what?, You went where?, and so on. Request for clarification can also take the form of interrogatives such as “Sorry?” Or “I beg your pardon?”, or even statements such as “I don’t understand”.

A case of feedback on vocabulary can be seen in Excerpt 4:

Excerpt 4

018-NAAg	have you (tried?) waterski?
019-BrAg	no
020-NAAg	no?
021-BrAg	WHAT?
022-NAAg	waterski
023-BrAg	WATERSKI?
024-NAAg	yeah do you know what it is?
025-BrAg	no
026-NAAg	like you know skiing... right?
027-BrAg	ski yeah
028-NAAg	you can ski on the snow... you can ski on the water as well
029-BrAg	ah ok

The BrAg answers the question on waterskiing (turns 018 and 019) with a “no” but she did not know the meaning of waterski. The NAAg realizes the BrAg does not know the meaning of “waterski”, checks whether she knows the word (turn 024) and provides an explanation (turns 026 and 028). This indicates that interlocutors aim at making sense and understanding their conversation and, at the same time, at thinking about the language, and testing and confirming linguistic knowledge. Feedback can therefore contribute to this process of analysing language within interactive processes, and foster language development.

Excerpt 5 illustrates a more elaborate negotiation of meaning between the interactants, due to miscommunication caused by the BrAg's linguistic limitations to express her ideas:

Excerpt 5

030-BrAg so here this/ this major normally ((2 s)) are five years... how can I
 031-NAAg [more usually
 032-BrAg yeah
 033-NAAg [[what were you gonna ask?
 034-BrAg [[how can I s/ how can I... uhm... this structure is not correct I stay/ what I stay ()
 035-NAAg what did you/ which one?
 036-BrAg ahm... there are this course have five years not correct or yes?
 037-NAAg [no... ahm... this course... TAKES
 038-BrAg ah ok
 039-NAAg five years ((*written in the chat: "takes": 3 s*)) I'm trying to think of... another way to... another example ()
 040-BrAg ahm
 041-NAAg ahm like you can say... it takes five years to graduate from law school
 042-BrAg uhm
 043-NAAg or something like that
 044-BrAg ok
 045-NAAg do you understand?
 046-BrAg yeah

It is interesting to notice that, once the discussion about how to say that an undergraduate degree (not "course", as said by the the BrAg in turn 036) in Brazil usually takes five years (turns 030 – 044), the NAAg confirms that the BrAg had understood his explanation (turns 045-046). This very much resembles what teachers do in classroom discourse.

Excerpts 6 and 7 illustrate two cases in which the BrAg's (knowledge of) pronunciation presented deviations from patterns of standard English, therefore causing problems in oral communication:

Excerpt 6

047-NAAg do you have a lot in your house?
 048-BrAg what?
 049-NAAg do you have a lot in your house?
 050-BrAg I/ I don't understand the word... la?
 051-NAAg A LOT ((*pronounced 'ay lot'*)) many do you have many?
 052-BrAg ah yeah ((*laugh*)) my mother loves plants... there are many plants in my house
 053-NAAg ((*laugh*))
 054-BrAg ((*laugh*))
 055-NAAg you don't/ you don't know that/ that word or those two words a lot ((*pronounced 'ay lot'*))?

056-BrAg	yeah
057-NAAg	ok
058-BrAg	((<i>stuttering</i>)) I/ I don't understand
059-NAAg	yeah that's hard
060-BrAg	because we normally said a lot ((<i>pronounced 'a lot' with 'a' as a single /a/ phoneme</i>))
061-NAAg	aham
062-BrAg	I d/ I didn't know you can say a lot ((<i>pronounced 'ay lot'</i>))
063-NAAg	oh... yeah you know it/ my accent... it depends on who you're talking to
064-BrAg	ahm

In Excerpt 6, the BrAg does not understand “a lot” as said by the NAAg (turn 049) and he repeats “A LOT” in turn 051, with emphasis, so that the BrAg was able to understand what he meant. Interestingly, they both laughed about the problem (turns 052, 053 and 054) and their laughing may indicate that they either considered it sort of silly that the BrAg could not understand /ei lot/ at first, or that they tried to minimize the relevance of such problem in their interaction. Such behaviour, of not giving too much importance to some types of mistakes and prioritizing the flow of communication, can be considered as a technique to avoid assessment being seen as a negative in language learners' linguistic performance, especially in oral skills.

In Excerpt 7 below, the BrAg mispronounces the word “museum” and the NAAg teaches her the correct pronunciation firstly by repeating the entire word (turn 068), then by comparing the words “museum” and “muse” (turn 070), and focusing attention at the lengthening of the diphthong (“eeum”, turns 070 and 072). The NAA uses both spoken and written language in order to help his interlocutor. By the BrAg's acknowledgement in turn 071 and her production of “museum” in turn 073 it is assumed that learning occurred and eventually she was able to pronounce the word correctly.

Excerpt 7

065-BrAg	pinacoteca ((33 s)) I/ I find/ I found... this site ((<i>sending link: http://www.sampa.art.br/saopaulo/pinacotecal.htm</i>))
066-NAAg	did you?
067-BrAg	uhum... it's a kind of museum... how is ((<i>stuttering</i>)) the pronunciation?
068-NAAg	museum ((<i>pronounced very clearly</i>))
069-BrAg	museum
070-NAAg	aham ((3 s)) like mu:se... which is also a word in english (<i>sent in written mode</i>): “muse”)... I don't know what it means ((<i>laugh</i>)) and then eeum
071-BrAg	ah ok
072-NAAg	like ((<i>sent in written mode</i>)): “eeum”) eeum
073-BrAg	museum

Excerpts 8 and 10 illustrate the last part of the teletandem session, in which the focus is explicitly on linguistic and interactive feedback:

Excerpt 8

- 074-BrAg uhm ((15 s)) ah the most american women drives? () drives?
 075-NAAg oh... drive? yeah... ahm yeah ((*laugh*)) every woman drives
 076-BrAg ahm
 077-NAAg because... in/ in our schools... ahm in our... second year of high school... we HAVE to take a course where we learn how to drive
 078-BrAg uhm
 079-NAAg we don't have other choice... men and women have to take it
 080-BrAg ah

In turn 074, the BrAg makes two grammatical mistakes (“the most american women drives (*sic*)?”), concerning the structure of a question in English and the incorrect verb form (“drives”), and it seems she attempted to self-correct her question in the same turn (“(...) drives?”), albeit unsuccessfully. The NAAg comments on her statement (turn 075) and he apparently tried to call the BrAg’s attention to the incorrect verb form by using the same form (“drives”) correctly, that is, in a statement and with the third person singular, “every woman drives”. This may be seen as indirect feedback, with more focus on maintaining interaction and the flow of communication. The same technique is also used in Excerpt 9:

Excerpt 9

- 081-NAAg wow ((2 s)) that's good that you have at least another type of gasoline to use
 082-BrAg ((28 s)) and alcohol don't pollute
 083-NAAg oh it doesn't pollute either
 084-BrAg no

In turn 028, the BrAg makes a grammatical mistake in “and alcohol don't (*sic*) pollute”. The NAAg, instead of making an explicit correction, comments on the BrAg’s utterance (turn083) by producing the same structure used previously by the BrAg, but this time using the correct auxiliary verb (“doesn't”).

Excerpt 10

- 085-BrAg ((38 s)) u:hm ((*building her question*)) ((5 s)) () what do you think about my mistakes?
 086-NAAg uhm let's see ((2 s)) I'm trying to see where I wrote down () one point... when you/ you meant to talk about a single woman... and you said woMEN

- 087-BrAg ((3 s)) [[uhm
- 088-NAAg [[you/ do you know the difference?
- 089-BrAg yeah
- 090-NAAg ok ((2 s)) it's a very small difference... you can only tell if you're really listening ((2 s)) but it's a... one woMAN and woMEN
- 091-BrAg ahm
- 092-NAAg a:::hm... and you said... what/ what's your father does... and you would say what's father do
- 093-BrAg ahm
- 094-NAAg just the verb to do... and then you said something else incorrectly with the same verb but I don't remember exactly what that was ((2 s)) but... it's a stupid verb anyway... it's very different... it's different forms ((3 s)) and then... when you said... do you know... to drive... and you need to put in HOW... do you know how to drive
- 095-BrAg ah ok
- 096-NAAg just making sure that when you use infinitive... of the verb... ahm when it's follow/ when it's following something like do you know or... I have... oh wait no it doesn't work like that just when you know
- 097-BrAg ahm
- 098-NAAg yet the know how to do something
- 099-BrAg ah ok
- 100-NAAg so we always say that... and there's pretty much yet ((3 s)) what did you think? was it pretty easy? ((5 s)) was it easy talking?
- 101-BrAg uhm?
- 102-NAAg was it EASY... talking?
- 103-BrAg yes
- 104-NAAg yeah? ((2 s)) do you/ do you think you've gotten better?... or do you think you you're more comfortable speaking in english?
- 105-BrAg ((3 s)) I think I am m/ I am more comfortable to speak in english
- 106-NAAg you think so?
- 107-BrAg yeah
- 108-NAAg that's good ((2 s)) yeah when/ today you're () you're saying a bunch a complex things and ((*faulty audio*)) having to stop and think about it too often ((3 s)) which is good
- 109-BrAg uhm
- 110-NAAg [[do you have
- 111-BrAg [[do you think I
- 112-NAAg oh go ahead
- 113-BrAg do you think I'm better?
- 114-NAAg ahm like I s/ I think today you... you just seem like you ((?)) or just talking needed which is good... it seems like there's a lot less having to think... about what you were saying ((4 s)) so that's good
- 115-BrAg uhum

In Excerpt 10 it is possible to follow a rather detailed conversation between the two interactants, motivated by the BrAg's question, "what do you think about my mistakes?" (turn085). The NAAG reminds her of a number of mistakes she had made previously, and provides explanations (turns 086-100), and the BrAg indicates acknowledgment by saying "uhm" (turn 087), "yeah" (turn 089), "ahm"

(turns 091, 093 and 097) and “ah ok” (turn 095). The NAAg then changes the subject (turn 100) and asks the BrAg whether she believes she can speak English more easily, and the BrAg says she feels “more comfortable to speak in English” (turn 105). Her impressions are then confirmed in turns 106-108, and the NAAg adds “you’re saying a bunch of complex things” (turn 108). The BrAg’s impressions about her performance in English are confirmed in turns 111-115.

The positive feedback given by the NAAg indicates his attempt to not only correct his interlocutor’s mistakes or provide linguistic information, but also to call her attention to the fact that her performance in English is improving. This technique can be a motivating factor in teletandem interactions.

In Excerpt 11, the BrAg invites the NAAg to speak about her mistakes again, and he reminds her of some mistakes (turns 121-135):

Excerpt 11

- 116-BrAg (8 s) ahm... let’s start to talk about my mistakes?
 117-NAAg Ok
 118-BrAg ok?
 119-NAAg you really didn’t make very many
 120-BrAg a:h
 121-NAAg you/ you did good... one thing... was when you were talking about ages... you said... my mom has... forty
 122-BrAg [ah yeah
 123-NAAg i/ it’s... she is... and then however many years old
 124-BrAg ah yes
 125-NAAg so l/ you know?
 126-BrAg ok... ok
 127-NAAg so like I’m 21 years old
 128-BrAg yeah I’m/ I’m nervous
 129-NAAg ok... don’t be nervous you speak very well
 130-BrAg ((*laugh*))
 131-NAAg you could come to America and live... fine without a problem... (2 s) your English is very good
 132-BrAg ahm thanks
 133-NAAg and then the only others... thing that you said wrong the entire time... was you said my grandfathers
 134-BrAg ah ok
 135-NAAg and you should have said my grandparents... I think ((*laugh*))
 136-BrAg ((*laugh*))
 137-NAAg and () (*audio failure*) (4 s) can you believe it?
 138-BrAg No
 139-NAAg yeah only two / only two errors

- 140-BrAg yeah?
 141-NAAg yeah... did you have problems understanding?
 142-BrAg no:... no

Similarly to the encouraging technique illustrated in excerpt 10, the NAAG produces positive comments such as “you really didn’t make very many ((*mistakes*))” (turn 119), “you speak very well” (turn 129), “You could come to America and live... fine without a problem...” and “your English is very good” (turn 131), and “only two / only two errors” (turn 139). The BrAg answers the NAAG’s question (turn 140) and informs him that she did not “have problems understanding” (turn 142). These answers may refer either to the fact that her mistakes did not impede communication, or they may indicate that she was able to understand which mistakes she had made and confirm that she has learnt the correct linguistic items.

As a whole, the agents seem to evaluate the level of understanding and the quality of their communication in English as satisfactory.

6. Discussion

The literature reviewed for this article points to principles in common in both language learning and language assessment, and to the existence of a variety of procedures and techniques available for assessing language learning and language performance in electronic environments – also referred to as CAA.

Data from the teletandem session presented in the previous section reveals a degree of coherence between language-learning principles and actions taken by the NAAG to assess her partner’s performance and provide help towards language development in a type of formative assessment. Agents follow their beliefs about language learning when they act as ‘the teacher’ in teletandem interactions, usually based on previous experiences in learning one or more foreign languages. Agents also act according to procedures that have been discussed or negotiated in the interactions and try to respect each other’s learning needs and preferences. Interactive patterns and language learning in teletandem interactions are characterized according to aspects that somehow differ from face-to-face teacher-student communication in standard language classrooms. Procedures for language assessment, however, seem to be grounded on the same principles that support language assessment in standard classrooms.

As stated in the first part of this paper, lack of linguistic competence and language mistakes are two phenomena that are commonly related to when and how teachers assess language learners in standard lessons. So, even though language use and assessment occur online, the most proficient agent’s

decisions and actions are similar to those taken by language teachers (and sometimes by more proficient interlocutors) in non-electronic contexts, for example. Thus, far, no significant differences have so far been found to be exclusive to CAA in such a way as to support a completely new paradigm for assessment in distance language learning/language learning in electronic contexts.

Computers, in fact, offer a variety of resources for storing and distributing data, and are helpful regarding aspects of random and anonymous assessment. Despite the contributions and innovations introduced with the use of CALL and CAA, the principles underlying language assessment in teletandem interactions do not seem to differ from those supporting assessment in standard classrooms.

It is expected that the possibilities concerning feedback on language use in teletandem interactions presented above can nevertheless contribute for language development, as well as provide a type of “teaching” experience on language assessment for more proficient agents.

7. Conclusion

In this study I reported on and discussed principles and aspects of language assessment in FL learning, with a focus on CALL and CAA. Data from interactions in the Teletandem Brazil Project has been used to illustrate some of my claims.

It seems that principles for CAA combine the more traditional bases for language assessment and testing with a number of pedagogical principles that underpin distance learning, but these principles do not characterise a new paradigm in language assessment. Conversely, CALL and CAA contribute in various aspects, especially when large numbers of learners are involved in the teaching and learning processes. However, the principles for language assessment followed in CAA do not seem to be significantly different from those for assessment and testing followed in more traditional teaching and learning contexts.

Finally, there seems to be a need for further investigation and the establishment of principles for language assessment in electronic contexts like teletandem. Further investigation is needed in order to analyse larger amounts of data, from several agents in the scope of the TBP, as well as an expanded review of the literature on CALL and CAA. This should make it possible to verify the validity of the conclusions reached in this discussion and eventually result in the definition of a paradigm for language assessment by means of computers in online interactions.

References

BACHMAN, L. F. 2014. Ongoing Challenges in Language Assessment. In: KUNNAN, A. J. (Ed.). *The Companion to Language Assessment*. John Wiley & Sons, Inc.

- BRAMMERTS, H. 2003. Autonomous language learning in-tandem. In: LEWIS, T.; WALKER, L. (Eds.). *Autonomous language learning in-Tandem*: 27 – 36. Academy Electronic Publications Ltd.
- BROCCO, A. S. 2007. *The systematization of grammar via a deductive approach in the teaching/learning of Portuguese in a teletandem context. Report of a Scientific Initiation study.* Department of Modern Languages, UNESP.
- CARTER, J.; ENGLISH, J.; ALA-MUTKA, K.; DICK, M.; FONE, W.; FULLER, U.; SHEARD, J. *How Shall We Asses This?* (mimeo).
- CAVALARI, S. M.; ARANHA, S. 2016. Teletandem: integrating e-learning into the foreign language classroom. *Acta Scientiarum*, 38: 327.
- CHAPELLE, C. A. 1999. Validity in language assessment. *Annual Review of Applied Linguistics*, 19: 254-272.
- CONSOLO, D. A. 2020. Foreign Languages and Computer-Assisted Learning: New Principles for Language Assessment in Teletandem?. *Iranian Distance Education Journal*, 2: 41-54.
- CONSOLO, D. A.; ANCHIETA, P. P. 2011. Avaliação de proficiência em língua estrangeira em meios virtuais: alguns princípios e características de exames e testes eletrônicos [Online and computer-based assessment of language proficiency: some principles and characteristics of electronic examinations and tests]. In: SZUNDY, P. T. C.; ARAÚJO, J. C.; NICOLAIDES, C. S.; SILVA, K. A. (Eds.). *Linguística Aplicada e Sociedade: Ensino e Aprendizagem de Línguas no Contexto Brasileiro*: 197-215. Pontes Editores.
- CONSOLO, D. A.; BROCCO, A. S.; CUSTÓDIO, C. M. 2009. Grammar and communication in Portuguese as a foreign language: A study in the context of teletandem interactions. *Proceedings of the 1st International CSEDU Conference (CD-ROM)*: 62-66.
- CONSOLO, D. A.; GATTOLIN, S. R. B.; TEIXEIRA DA SILVA, V. L. (Eds.) 2017. *Perspectivas em Avaliação no Ensino e na Aprendizagem de Línguas: pesquisas e encaminhamentos na formação e na prática docente.* Pontes Editores.
- CUSTÓDIO, C. M. 2007. *Final report on a scientific initiation project.* Department of Modern Languages, UNESP.
- FRESCHI, A. C. 2017. *A Avaliação por Pares no Teletandem Institucional Integrado: um Estudo de Caso sobre o Feedback Linguístico nas Sessões Orais em Português* [Peer Assessment in the Institutional Integrated Teletandem: A Case Study about Linguistic Feedback in Oral Sessions in Portuguese]. Dissertação de Mestrado, UNESP.
- GARRISON, D. R.; ANDERSON, T. 2003. *E-Learning in the 21st Century: A Framework for Research and Practice.* Routledge Falmer.
- GOERTLER, S.; SCHENKER, T.; LESOSK, C.; BRUNSMEIER, S. 2018. Assessing Language and Intercultural Learning during Telecollaboration. In: LINK, S.; LI, J. (Eds.). *Assessment Across Online Language Education*: 21-48. Equinox and Calico.
- LINK, S.; LI, J. (Eds.) 2018. *Assessment Across Online Language Education.* Equinox and Calico.
- MEZIROW, J. 1991. *Transformative Dimensions of Adult Learning.* Jossey-Bass.
- ROSSI DOS SANTOS, G. 2008. *Características da Interação no Contexto de Aprendizagem In-Tandem* [Characteristics of Interactions in Teletandem as a Learning Context]. Dissertação de Mestrado, UNESP.
- SCARAMUCCI, M. V. R. 2000. *Proficiência em LE: considerações terminológicas e conceituais* [Proficiency in a FL: considerations on concepts and terminology]. *TLA: Trabalhos em Linguística Aplicada*, 36: 11-22.
- SCHÖN, D. A. 1983. *How professionals think in action.* Basic Books.
- SHOHAMY, E.; INBAR, O. 2006. *The Language Assessment Process: A “Multiplism” Perspective.* Center for Advanced Language Proficiency Education and Research (CALPER).

- SINCLAIR, J.; COULTHARD, M. 1975. *Towards an Analysis of Discourse*. Oxford University Press.
- SINCLAIR, J.; COULTHARD, M. 1992. Towards an analysis of discourse. In: COULTHARD, M. (Ed.). *Advances in Spoken Discourse Analysis*: 1-34. Routledge.
- STERN, H. H. 1983. *Fundamental Concepts of Language Teaching*. Oxford University Press.