

Alternative Computer Assisted Communicative Task-based Language Testing: New Communicational and Interactive Online Skills

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Abstract—Computer-assisted language learning knowledge tests should no longer be designed on traditional skills to measure individual competence through traditional skills such as reading, comprehension and writing, but instead, it should diagnose interactive and communication skills in foreign languages. In recent years in online education, it has been necessary to review the concept of interactive competence in digital environments in a complementary way to its traditional use. It is important to promote a new typology of alternative tasks and items in tests where examinees can prove a real interactive performance in communication and interaction through the digital scenario. This should be done through tools that facilitate oral negotiation, the management and understanding of the information extracted from online repositories, the search for suitable online digital material, and the use of new modes of audio-visual communication. Although some of these tasks have been used in a complementary way in the design of language tests previously: it is true that they have not been applied in a coherent way to be used as an assessment tool. A first approach was made by Miguel Álvarez, García Laborda & Magal-Royo (2021) in the development of oral negotiation skills through the use of interactive tools. The current online assessment models analyzed by García Laborda & Álvarez Fernández (2021) indicate the need to seek new ways of assessing foreign languages through the design of tests that fit in the current digital and interactive world.

Keywords—Computer-assisted language learning, testing, language testing tasks, online assessment models, interactive online skills

1 Introduction

Language assessment has an increasing significance in today's world. From the educational perspective, it is necessary to position and diagnose the learning of a second language in order to foresee the potential of students as future workers in the world and also observe the health of the national educational systems. That is the main reason why the main test suite organized by The Organisation for Economic Co-operation and

Development, OECD's Programme for International Student Assessment, the PISA tri-annual report will measure foreign languages in 2025 [1]. However, significant studies have claimed for many years the fact that the current model of language testing based on Weir's [2] framework looks static and old fashioned due to the inclusion of tasks such as those found in objective tests (matching, multiple choice, giving titles to paragraphs, etc...) [2]. However, currently traditional skills that measure individual competences such as reading and writing comprehension and expression are insufficient to assess the true competence of a language user based on the form of online learning that has been received, as opposed to the traditional centrality of potential competence. This type of items have been in the field of language testing since the 1960s. Recent trends in language testing have claimed the little signification of objective tests, additionally; some researchers have claimed innovations such as the use of avatars for language assessments. The claims of most of these competence-centered test models is that these measurements "prove", if tests actually prove anything, the personal competence. The problem is that communication is based on both competence and performance but just too often a flaw on the performance part is way worse than the counterpart. While the latter may lead to an incomplete message, the former usually means breakouts in communication. Therefore, it is necessary to seek new tasks that can provide evidence of performance through communicative features.

2 Conceptual framework

In a recent paper, Fernández Álvarez, García Laborda & Magal-Royo [3], state that there are significant problems in regards of face and content validity that require new types of tasks. This short paper addresses the technical tools to face the challenge of obtaining a more robust platform to implement those tests. The same authors propose the following diagram to conceptualize the principles that should guide the implementation of the project (figure 1).

This framework is based on three on the definition of the language that is going to be assessed, 1) Interaction, 2) Language context, 3) Assessment strategies. The very same language definition and description is going to move towards the implementation and use of the tools to record and verify the testee's performance. The role of technology is to facilitate the tools that can serve to do so. Thus, the design must look at the technical specifications of the traditional test than can be found. The most significant issues can be observed in table 2 where the processes related to the communication channel are displayed while showing the significant role of according to the type of channel or data input (view, speak, listen, touch, peer communication, etc ...): as well as the importance of interfaces and the type of device through which the test is delivered.

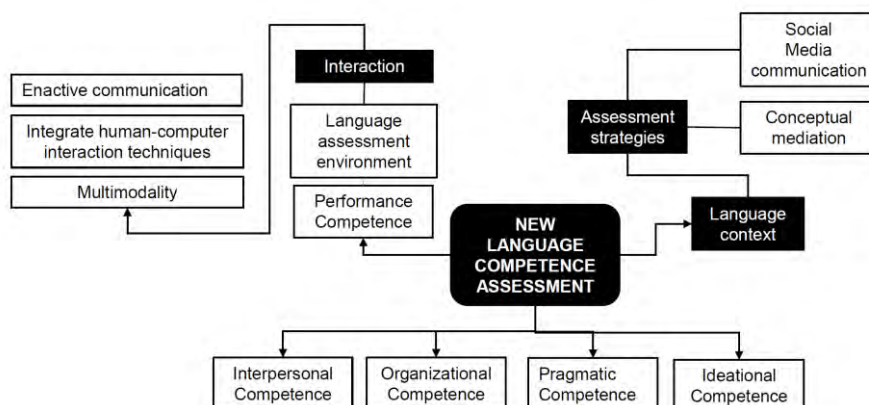


Fig. 1. Conceptual framework of an interactive language test (based on Fernández Álvarez, García Laborda & Magal Royo (2021, in press))

What is most important is to ensure that the IT tools serve to guarantee that the test items really reflect the real life tasks, especially in terms of usability [25], interactivity [26], accessibility [27], user experience [28], acceptance [29] and multimedia [30], than can be assessed through the ad-hoc designed rubrics. The model presented above (figure 1) requires the use of online methodologies to access to part of the information learned and received online in the different test items, which includes digital content adapted for language testing [4]. This implies the need for the user to know, manage and use digital communication environments as part of communication and professional skills which are likely to be found a professional future scenarios.

The use of tools such as oral negotiation [5], the management and understanding of the information extracted from online repositories, the search for suitable online digital material, and the use of new audiovisual communication modes are integrated elements in new types of language testing items. This paper will analyze the importance of using interactive communication in education and language testing. Although some of these tasks have been used in a complementary way in the design of evaluation tests, the truth is that they have not been applied in a coherent systematic way to evaluate language test candidates. The next section discusses the importance of looking for new ways of assessing foreign languages by designing tests in line with today's digital and interactive world.















Features of a traditional task design for testing				
Channel/data entry	Devices	Interface	User's sets	General purpose for testing
View 	Screen 	Screen access to a viewing configuration	Position of screen or tablet/configure the brightness/contrast	Visual access to the information about the english reading, writing, listening, oral assessment /Instructions/ Do task/test/act
Listen 	Earphones 	Screen access to a listening configuration	Position of the headphones/ configure the sound volume	Listening access the information about the english english listening, oral assessment /Instructions/ Do task/test/act
Speak 	Microphone 	Position of the headphones/ configure the sound volume	Position of the microphone/ configure volume	Emit words to access the information about the english listening, oral assessment /Instructions/ Do task/test/act
Touch 	Screen/Tablet 	Screen access to touch configuration on the screen	Position of screen or tablet/configure the brightness and/ or contrast	Select buttons or links to access the information about the english reading, writing, listening, oral assessment/Instructions/ Do task/test/act
Keyboard 	Physical/virtual keyboard 	Keyboard configuration	Position of screen or tablet/keyboard	Select buttons or links to access the information about the english reading, writing, listening, oral assessment/Writing words/ sentences/grammar to do task/test/ act
Mouse 	Physical/integrated mouse/pencil 	Mouse configuration	Position of screen or tablet/keyboard	Select buttons or links to access the information about the english reading, writing, listening, oral assessment/Instructions/ Do task/test/act
Peer communication 	Physical/integrated webcam 	Webcam configuration	Position of the webCam to recorder	Create a audiovisual record information about the english listening, oral assessment / Instructions/ Record a audiovisual of task/test/ act

Fig. 2. Features of a traditional task design that must be addressed through online tools

3 Interactive skills for assessment in virtual environments of foreign language learning.

Online language learning environments such as virtual classrooms are used by students in a self-directed way frequently. Self-learning is at present reducing the digital gap worldwide [6]. Currently students handle interactive tools in a frequently both in social life and in their training [7]. Some studies raise year after year the impact of new

technologies in online training, including language learning, which determine that students have adapted quickly to the changes and processes of digital communication in the classroom, both in person as virtual [8], [9]. It is on effective interactive communication that language learning should focus and should therefore be included in current assessment methods.

Following the criteria of the report created in 2020, the Common European Framework of Reference for Languages, CEFR [10], which analyzes the competencies that influence interactive communication and the management of student information when they learn a language, it is necessary to rethink how to design new ways of evaluating students according to today's communication and professional needs. This is especially convenient to cover levels A-1 to C1 in the official languages of the European Union in general based on criteria as significant as interaction, mediation and interactive communication with the new existing digital media.

These three aspects require technical knowledge of the interactive medium that allows adjusting the technological needs of each person to the types of new assessment tasks of language competencies. In fact, the great diversity of communication and interaction channels has made it possible to define the need to create tasks from multimodality, understood as the use of communication channels in a synchronized way as occurs in the real world [11], [12]. Interaction allows us relate and learn from the environment synchronically according to what our senses capture at the same time [13]. Mediation helps us adapt to the environment and language depending on our needs to transmit, convince or defend a position in a conversation [14], [15] and finally communication in the digital media brings us closer to the real world communication and helps the language learner develop real critical thinking [16]. All of this must serve to define new ways of assessing foreign languages by designing tests in line with today's digital and interactive world [17].

4 New paradigms in computer assisted languages testing tasks

According to the needs to develop a more interactive assessments, the combination of language use and multimedia use in a real world must lead to the design and increase of the presence and use of interactive learning environments that are currently being used in communication and interaction skills will shape the design of new forms of tasks for language tests. [18]. Additionally, the new types of assessment tasks and items should consider not only virtual forms of exam delivery (traditionally on desktops) but also new ubiquitous devices [19]. In order to achieve more communicative test-items forms the following proposal of items are described in table 1.

Table 1. Description of interactive task for computer assisted language learning

Skill assessment	Task description
Reading	Use online digital libraries/repositories for summarizing and analyzing reading information. Use and consulting online dictionaries for comprehension. Use social network media texts post, news, tweets, etc ... for summarize and interpret.
Writing	Describe and understand digital static images (from digital photographic libraries / repositories). Describe and understand digital audiovisuals (from digital audiovisual films from libraries / repositories). Do audiovisual presentations that include interactive digital documents. Create scientific articles that include links and digital references in text. Create opinion articles that include links and digital references in text.
Speaking	Peer communication speaking to current news. Peer communication for negotiation with a goal. Peer communication for presentation of results.
Listening	Listen and understand digital audio files. (speech, conversation, voice-over, etc..) Listen and understand digital Audio Broadcasting, Radio/TV news Listen and understand digital audio files. Life music. Listen and understand environmental, especial and/or sensorial sound. Binaural sound, Holophonic sound, HRTF sound. Listen and understand Sound clips/effects. Listen and understand digital audio files from a website. Podcast.

5 Conclusions

This paper presented succinctly the tools and features to design multimodal test items that reflect the language use more realistically, specifically in terms of use of digital media and also in cooperative scenarios where two or more test takers can interact. The design of these types of tasks should also encourage the creation of quality repositories in new digital file formats that can serve for adaptive language tests through the combination of task libraries that can be obtained through a continuous process to test creation especially for foreign language test creation and administration companies such as Cambridge Assessments, the Educational Testing Service or even national agencies. Obviously, the main limitation of this paper is that this a work in progress that will need further research in terms of design and trialing both technological and linguistic. In this sense, a significant amount of work is to be faced soon but the outcomes make worth the efforts.

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