

# Integration of digital technologies in oral teaching: Opportunities and challenges for the development of interactional competence

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## Abstract

Teaching approaches are moving away from the traditional transmissive model in favor of an interactive approach to learning. This shift has profoundly transformed language teaching, particularly oral language teaching, where a new skill - oral interaction - has been added to the four traditional skills of written comprehension and production, and oral comprehension and production. Learners become active participants in their own learning, developing their skills through interaction and cooperative work, while benefiting from the guidance of the teacher, who provides the necessary support to promote the development of their autonomy. This reconfiguration is in line with the socio-constructivist perspective developed by Vygotsky, which emphasizes the fundamental role of social exchange and mediation in the development of learning. Today, it finds decisive support in the rise of digital technologies, which have become essential components of contemporary educational practices. When integrated into a coherent teaching framework that promotes cooperation, autonomy, and learner engagement, these technologies prove to be powerful catalysts for the acquisition and improvement of oral skills, particularly interactional skills. However, analysis of the *Passerelle Français* textbook, intended for third-year secondary school students, reveals a notable discrepancy between the teaching intentions stated by its designers and the oral activities actually offered. This discrepancy highlights the persistent limitations of the still incomplete integration of digital tools into oral language teaching and raises questions about the consistency between the educational guidelines advocated and their actual implementation in the classroom.

## Keywords

didactic transposition, Technology-Mediated Language Learning (TMLL), interactional competence, textbook, ICT in education

## 1. Introduction

In the current context, technological devices play an essential role in education. They represent a major lever for the development of new skills, particularly those required by the professional world, such as the ability to interact within projects and collaborative tasks supported by digital platforms [1, 2]. Faced with these rapid changes, schools cannot remain on the sidelines of the social and technological transformations that are redefining the way we learn and work. It must prepare citizens capable of adapting and integrating into this constantly changing world, with its renewed demands.

In this context, the study focuses on the teaching of French in Moroccan public secondary schools. The *Passerelle Français* textbook, designed for the third year of secondary school and currently in use, served as the main focus of this work. This textbook is an important didactic reference for both teachers and learners. The study stems from the need to examine whether the designers have incorporated new technologies, particularly in the design of oral activities, to meet current training requirements. To assess the relevance of the materials and activities proposed in the textbook, this study draws on recent advances in developmental learning theories, as well as contemporary contributions from didactics and pedagogy.

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The remainder of this paper is organized as follows. Literature review on learning theories and the pedagogical uses of technology is presented in Section 2. The contribution of digital devices to the development of interactional skills in the oral classroom is described in section 3. Section 4 illustrates the methodology, describing the data collection process as well as the corpus and method used. Section 5 presents quantitative insights into oral interaction and Interpretive analysis of the corpus, Section 6 discusses the limitations and future work, and Section 7 concludes by summarizing the findings and their interpretations.

## **2. Literature review**

The history of learning theories reflects a major conceptual shift that has had a profound impact on the field of education. The didactics of Foreign Languages (FL) has been particularly influenced by this, undergoing a significant transformation both in the definition of its object and in teaching and learning methods. These developments are the result of successive epistemological paradigms and the methodological approaches that have emerged from them, leading to profound changes in the aims and practices of the field [3]. Indeed, at the turn of the 1990s, a paradigm shift occurred: conceptions of learning were renewed in light of socio-constructivist and interactionist theories, gradually integrating the opportunities offered by emerging technologies. However, it was only in the early 2000s that the meteoric rise of computing and digital tools profoundly transformed teaching practices. The computer became an indispensable tool in language teaching and learning, fostering the emergence of multimodal, interactive, and learner-centered environments [4].

To better understand the characteristics of this shift, the analysis by *Warschauer and Meskill* [5] is referenced, who trace the evolution of Computer-Assisted Language Learning (CALL) and identify three successive major approaches: behaviourist, cognitive and social-cognitive.

### **2.1. Behaviourist approach**

Behaviourist approach, which stems from the structuralist theories of the 1960s and 1970s, considers language to be independent of any production context. It gives priority to knowledge as an object, and confers on the teacher an essentially transmissive role, embodied in mastery-style teaching. The student was seen as a passive receptacle, destined to assimilate knowledge. The central objective was the acquisition of linguistic competence - a notion introduced by *Chomsky* - which aimed to automate the use of language structures through structural exercises, without taking into account real communication situations.

In this context, the computer was used in an instrumental way, likened to a tutor responsible for providing repetitive exercises based on pre-established structures, with binary feedback (of the “true” or “false” type) [6]. This mechanical, decontextualized treatment of language has been strongly criticized, with many researchers questioning the effectiveness of such practices. The stimulus-response model, derived from behaviourism, prevailed for a long time before being called into question in the 1980s by representatives of the cognitivist movement. Critics of behaviorism argued that it reduced learning to a series of conditioned responses, ignoring both the context and the mental processes involved.

Theoretical advances have profoundly influenced language teaching, notably in the way the learner’s role and the very nature of the learning act are conceived. While structural exercises aimed at automating certain linguistic forms remain, a gradual shift is taking place towards taking into account the learner’s cognitive process, appropriation strategies and autonomy in managing his or her learning path. The learner is no longer simply a passive receiver of knowledge; he or she becomes an actor engaged in a dynamic process of interaction, including with digital devices.

### **2.2. Cognitive approach**

From the 1970s and throughout the 1980s, a major turning point occurred in the field of educational science with the rise of the cognitive approach, accompanied by the emergence of sociolinguistics,

speech act theory and pragmatics. This current challenges the traditional behaviourist model, based on the linear stimulus-response schema, by emphasizing the learner's active role in the learning process.

The cognitive approach is based on the idea that learning is not simply the accumulation of external knowledge, but a complex process of internal knowledge construction. The learner is perceived as an active subject, endowed with mental strategies mobilized to understand, interpret, organize and integrate new information into his or her pre-existing cognitive structures. This vision implies a profound reconfiguration of pedagogical practices: teaching is no longer aimed at the univocal transmission of content, but seeks to create didactic situations that encourage reflection, problem-solving, the mobilization of prior knowledge and the development of metacognitive skills [7, 8]. In this way, classroom activities are designed to support students in the development of their own representations, enabling them to interact with knowledge in an autonomous and meaningful way. In this way, learning becomes a dynamic and constructive process, closely linked to the individual's capacity for self-regulation. The cognitivist approach has thus placed the internal workings of the learner at the center of reflection, focusing on acquisition mechanisms and the way in which the individual processes information. It was against this backdrop that Computer-Assisted Instruction (CAI) emerged, marking a first attempt to integrate technology into the field of education. Early CAI was essentially based on an individualized model, sometimes referred to as the solitary learner model, characterized by pre-programmed teaching sequences centered on training in pre-defined speech acts (inviting, refusing, authorizing). The aim was then to enable the learner to reuse these acts in real-life communication contexts, particularly with a view to integrating into a foreign sociolinguistic environment.

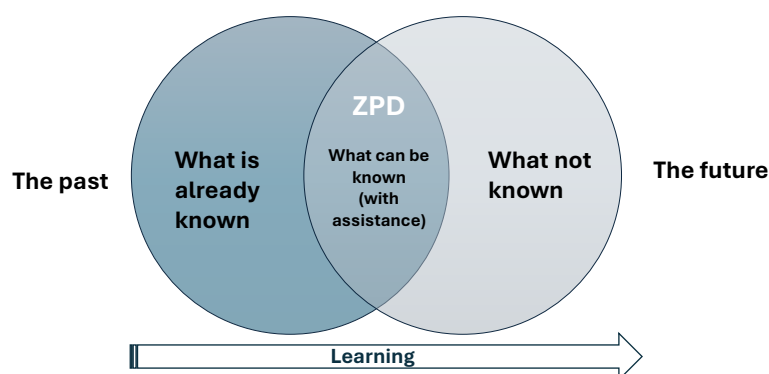
However, this perspective, while innovative, has not escaped criticism. Indeed, it remains centered on the individual, whom it regards as an isolated agent operating on pre-established content, without fully integrating the social, interactive and situated dimension of learning. The traditional approach to learning, centered on an individual in limited interaction with his or her environment, is profoundly challenged. It was against this backdrop that, from the 1990s onwards, socioconstructivist and interactionist approaches emerged, introducing a new way of understanding learning processes. At the same time, information and communication technologies were developing rapidly: discussion forums, videoconferences, collaborative platforms, and webinars gradually established themselves as the preferred tools for disseminating and co-constructing knowledge. This dual development marked a decisive break in educational practices [9, 10].

### 2.3. Social-cognitive approach

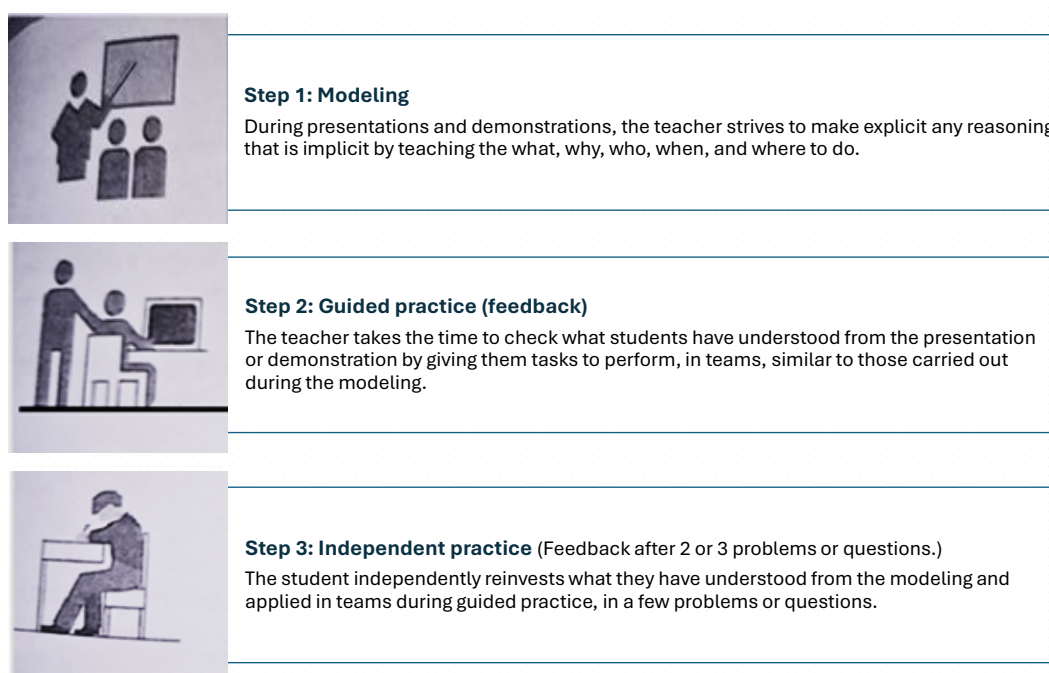
Thanks to significant advances in the field of language science during the 1970s and 1980s, work in linguistics, sociolinguistics and the ethnography of communication profoundly transformed our understanding of language phenomena. Under the aegis of *Dell Hymes*, a leading figure in the ethnographic approach, the innovative notion of communicative competence emerged. This complements, without invalidating, the *Chomskyan* concept of linguistic competence by integrating dimensions that are crucial to effective communication: non-verbal and paraverbal elements, as well as contextual socio-cultural parameters that condition the production and interpretation of utterances [11].

At the same time, the social-cognitive approach has emerged as a response to the limitations identified in earlier theoretical frameworks. It places learning within a dynamic of interaction, cooperation and co-construction of knowledge. Drawing on the contributions of socioconstructivist research, and benefiting from the technological advances of the time, this approach sees the acquisition of knowledge as a process that moves from the interpsychic to the intrapsychic level. The learner's active participation in social and interactive activities thus constitutes a fundamental lever enabling him to evolve within his Zone of Proximal Development (ZPD) [12], as illustrated in the Figure 1.

The contributions of *Vygotsky's sociocultural theory* have profoundly transformed our conceptions of learning. The learner is envisaged as a social being whose knowledge is developed through interaction, feedback and technological mediation. As he progresses through the learning process, the learner acquires increasing autonomy, gradually detaching himself from the appropriate support or scaffolding presented by his teacher (Rosenshine, B.V. & Stevens, R., 1986, p. 376-391) [13] (Figure 2).



**Figure 1:** Zone of Proximal Development (ZPD) (Adapted from [12]).



**Figure 2:** The stages of explicit teaching (Adapted from [13]).

The contributions of sociocultural theory have exerted, and continue to exert, a decisive influence on the field of education in general, and on foreign language didactics in particular. Inspired by the seminal work of *Vygotski*, language didacticians gradually adopted a social-cognitive approach to the teaching of oral language. This evolution has coincided with the rise of digital technologies, which have opened up new prospects for computer-mediated interaction and collaboration (forums, videoconferencing, interactive platforms, etc.).

From now on, technologies are no longer perceived as mere tools for transmitting knowledge, but as truly dynamic learning environments, fostering the emergence of innovative, interactive and contextualized teaching practices. In this context, attention is now focused on language use in authentic social contexts, and teaching situations tend to reflect “socially plausible” communication configurations. Cooperative learning, one of the most recent developments in oral didactics, is a perfect illustration of this orientation. Here, interaction - whether face-to-face or at a distance - is seen not only as a means of acquisition, but also as a pedagogical goal in its own right [14, 15].

In a world where technologies are evolving at a rapid pace (artificial intelligence, interactive web, virtual reality), today’s educational institutions are faced with the imperative need to adapt their

teaching-learning systems. The thoughtful and effective integration of these technologies is a response to new educational challenges, particularly in terms of developing oral interaction skills. It is all the more relevant as it is aimed at digital natives, for whom technology represents both a familiar environment and an undeniable source of motivation. A forward-looking study of tomorrow's schools rightly points out that :

*L'une des exigences de base de l'école du futur est de préparer les élèves au travail en réseau et de les intégrer à la société de l'information, dans laquelle la connaissance constitue la ressource fondamentale pour le développement économique et social [16].*

In this constantly changing context, socio-economic developments are prompting educational policy-makers to redefine the criteria for quality and efficiency in school training, adapting it to the demands of a world in perpetual transformation [17, 18]. In this respect, Information and Communication Technologies (ICTs) appear to be the ideal tools to support this dynamic of renewal. As some researchers have pointed out, they have the potential to profoundly modify teaching and learning methods, while giving the education system a greater capacity to adapt to contemporary challenges [16]. It is with this in mind that recent curricular reforms are increasingly integrating ICT, taking into account the benefits it offers, particularly in developing oral interaction skills. These reforms draw on current research findings to justify a new vision of the design of curricula, pedagogical guidelines and, in particular, school textbooks, through a renewal of teaching aids and methodological approaches adopted for the teaching of oral skills.

There are several arguments in support of this approach:

- The interactivity offered by digital devices encourages the learner's cognitive and metacognitive engagement, thus improving the quality of learning;
- Artificial Intelligence (AI), by adapting content to the specific needs of each student, makes it possible to individualize learning paths and promote a personalized pace of progress;
- Digital environments can reproduce real-life situations (business meetings, travel, social interactions), facilitating the acquisition of authentic communication skills;
- The Internet makes both asynchronous and synchronous communication possible, whether between teachers and students, or between peers;
- Chatbots give learners the opportunity to interact with virtual partners at any time, boosting their confidence and fluency;
- Finally, tools such as chat, videoconferencing and voice messaging enable instant collaboration, even at a distance, creating an interactive and collaborative learning space in real-time.

### **3. Interactional skills: The contribution of digital devices to their development in the oral classroom**

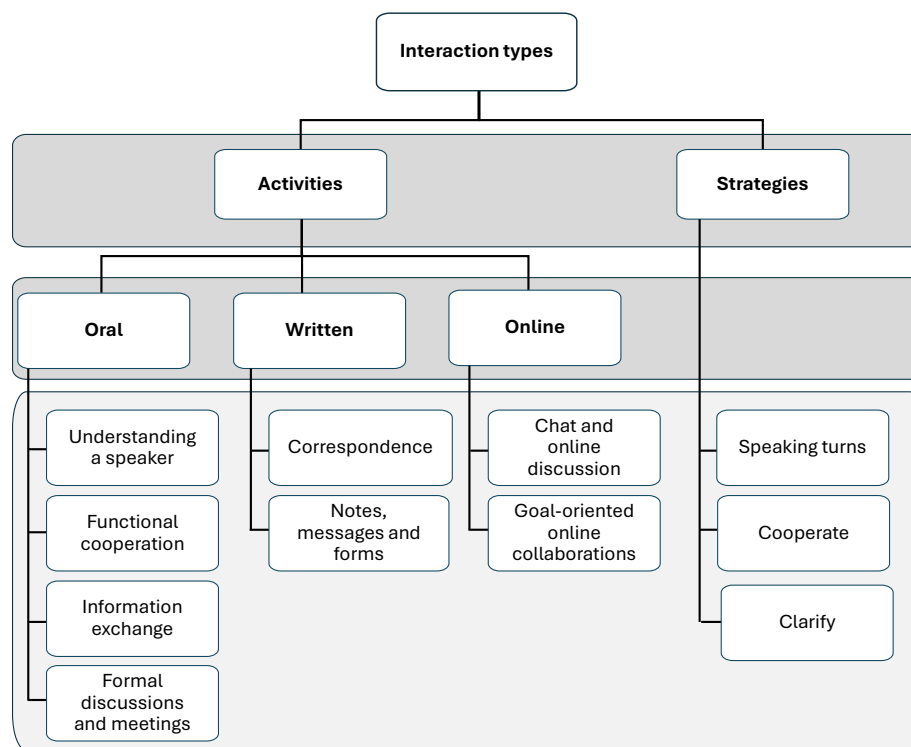
Following on from previous theoretical reflections, we now turn our attention to a competence that occupies a central place in contemporary language practices: interactional competence.

The result of a profound revision of traditional conceptions of foreign language communication, this competence is part of an approach based on social interaction, mediation and the co-construction of knowledge, thus challenging the limits of individual, disembodied and decontextualized learning. Whereas communicative competence was based on mastery of a stabilized repertoire of language, acts to be activated in contexts close to reality, interactional competence proposes a more dynamic, relational and contextual vision. It is based on the ability to act with others, as one emblematic definition aptly points out: *"The fundamental difference between interactional and communicative competence is that IC is not what a person knows, it is what a person does together with others"* [19].

In a world marked by mobility, collaboration and the omnipresence of digital technologies, this skill is becoming essential in both the social and professional spheres. In response to these demands,

educational training has been given a renewed role, in that it must now prepare learners to interact effectively in diversified, complex and highly technological environments. It is in this dynamic that the strategic place of oral interaction in language teaching/learning is asserted: not only as a learning objective, but also as a privileged means of cognitive, social and linguistic development. Students are no longer simply recipients of knowledge: they become actors in their own learning, part of the micro-society that is the classroom, where speech, exchange and collaboration play a structuring role. In this respect, cooperative learning illustrates the current evolution of didactic practices. It draws on the contributions of interactional didactics and action-oriented approaches, and implements strategies that are transferable to professional and civic life, at a time when digital devices - telecollaboration, videoconferencing, interactive forums, etc. - are redrawing the contours of exchange situations.

From this perspective, the use of information and communication technologies, reinforced today by the development of artificial intelligence and human-machine interaction, cannot be reduced to an accessory function. On the contrary, their judicious integration into the oral language classroom is a powerful lever for creating authentic, stimulating and formative learning situations [20]. The Complementary Volume of the Common European Framework of Reference for Languages (2022) [21] fully embodies this evolution by recognizing interactional competence as a priority objective of modern language teaching. It advocates a resolutely action-oriented approach, where the proposed tasks engage learners in real or simulated communication situations, valuing cooperation, initiative, speaking up and regulating exchanges in diversified contexts, as illustrated in the Figure 3.



**Figure 3:** Online interaction activities and strategies proposed by the CEFR (Adapted from [21]).

Note: The focus is on cooperation, an essential component of both the activities and the oral strategies, reflecting its role in the development of this skill

In light of this theoretical and pedagogical evolution, we propose, in the following section, to examine the extent to which the oral activities in the Passerelle Français manual integrate digital technology to support the development of interactional competence. This analysis aims to assess the relevance of the materials, learning situations and methodological approaches adopted by the designers.



## 4. Methodology

### 4.1. Data collection

To better understand this development, it seemed appropriate to seek the opinion of the main actors in the teaching-learning process, namely teachers, whose contributions shed light on the factors likely to influence the level of interaction among learners in oral classes.

To collect this data, a concise questionnaire consisting of four items was developed and distributed digitally to secondary school French teachers in two public schools in Morocco. We received 60 responses. The questions focused on: years of professional experience, as experience influences the effectiveness of teaching practices; training received in the use of Information and Communication Technologies (ICT) in oral teaching; the effective integration of these technologies into classroom practices; and, finally, perceptions of students' level of oral interaction.

### 4.2. Analyzing the textbook: Corpus and method

The textbook *Passerelle Français*, intended for teaching French in the third year of lower secondary education (2023 edition) and currently in use, serves as the reference corpus for this study. An analytical and comparative approach was adopted to examine the extent to which this didactic tool integrates Information and Communication Technologies for Education (ICTE) into oral activities, as well as to evaluate the role assigned to oral expression within the pedagogical progression. The analysis focuses on two main areas:

- the didactic status of oral expression in the proposed sequences (is it treated as a simple means of learning, or as an objective in its own right?)
- the degree of integration of ICTE in oral activities, in line with current trends in the teaching of French as a foreign language.

#### 4.2.1. Didactic positioning and analysis axes

This textbook, currently used in the teaching of French as a Foreign Language (FFL) in secondary schools in Morocco, constitutes the corpus selected for this study in 2025. The Figure 4 presents the main information: the title of the textbook, its edition, the level for which it is intended, the skill and project worked on during the period under consideration, as well as the four activities making up the sequence, including oral, with the associated pedagogical objectives. The place given to oral expression in the progression of the didactic sequence is also indicated.

The designers of this textbook have structured the content into didactic sequences, themselves organized by period. The sequence analyzed is part of period 5, corresponding to the first semester, and focuses on the theme of "*Talking about oneself and one's environment*". It aims to develop a specific skill: understanding and producing correspondence, in connection with a final project involving the creation of a letters collection - in paper or digital form - in which students present their identity, their school, as well as their village, town or region. The sequence is made up of four main activities: *reading*, *language-communication*, *oral* and *written production*, organized according to a coherent progression.

- The **reading activity** (p. 73) initiates the sequence by studying a subjective description and identifying the means of characterization.
- Followed by the **language-communication activity** (p. 76), which enables students to learn how to express a positive judgment using these same procedures.
- The **oral activity** (p. 78), placed after the first two activities, invites students to mobilize what they've already learned to gather information from an interview and express their opinion on their environment.
- Finally, the **written production** (p. 79), which brings the sequence to a close, represents the culmination of the work undertaken: students are asked to write a descriptive message about a place.

<b>Textbook title:</b> <i>Passerelle Français</i> <b>Edition:</b> 2023 <b>School level:</b> 3rd year of secondary school <b>Period 5 / Sequence 3:</b> Talking about yourself and your environment <b>Competency:</b> understand and produce correspondence <b>Project:</b> create a collection of letters (in paper or digital format) in which each of us talks about ourselves, our school, our village, our town or our region.		
Activity	Activity objective	Page
Reading	<ul style="list-style-type: none"> <li>Studying a subjective description.</li> <li>Identify the means of characterization.</li> </ul>	73
Language and communication	<ul style="list-style-type: none"> <li>Express a positive judgement using the means of characterization.</li> </ul>	76
Oral	<ul style="list-style-type: none"> <li>Gather information from an interview.</li> <li>Ask for / give one's opinion about one's village or town.</li> </ul>	78
Written production	<ul style="list-style-type: none"> <li>Write a message describing a place</li> </ul>	79

**Figure 4:** Presentation of the study corpus and the place of oral activity in the didactic sequence [22].

All the activities in the sequence thus contribute to the gradual development of the targeted skill. This progression is reflected in the final project, which gives meaning to the learning and offers an authentic production task, integrating the knowledge and skills developed throughout the sequence.

#### 4.2.2. Pedagogical approach and tools used

At the top of the page is the title: "Talking about your village or town". The course is divided into two stages:

##### **First step:** *"I listen and discover"*

In this sequence, students are confronted with an audio document - an interview - as a starting point. This stage is structured around three successive instructions:

- The first instruction invites the learner to listen to an exchange between two characters, Nada and Omar, the latter playing the role of the journalist. The learner is then asked to complete the journalist's cards, proposed immediately after the instruction.
- The second instruction is to listen to the interview again, this time to identify the questions posed by the journalist.
- The third instruction engages students in a role-playing exercise in pairs. They are asked to re-enact the interview, highlighting the assets of their college or town, and expressing what they like about it.

##### **Second step:** *"I apply and transfer"*

This step involves an oral activity in which students are invited to find four photographs representing places they like in their village, town, or region. They begin by locating each place, then describe it using characterization techniques. Finally, they express their reasons for appreciating each place.



## 5. Results and discussion

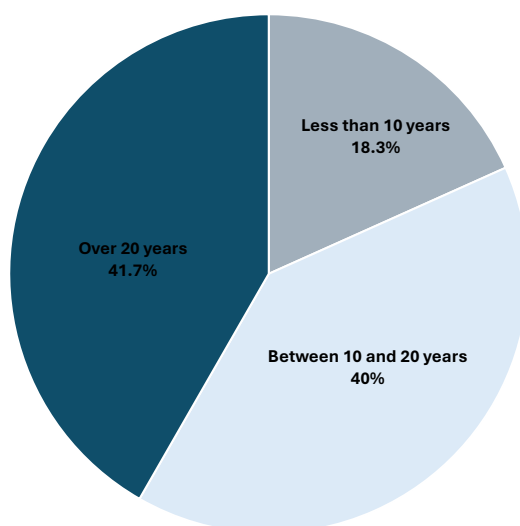
A detailed analysis of the oral course reveals a notable inconsistency between the stated pedagogical aims and current requirements for the development of interactive speaking skills, particularly with a view to peer cooperation and the integration of ICT.

### 5.1. Quantitative insights into oral interaction

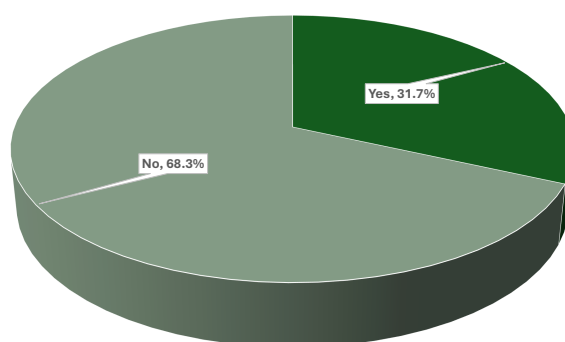
The survey responses yielded several key elements for analysis:

- Firstly, the seniority of the teachers surveyed — a factor likely to influence their teaching practices
- Secondly, their evaluation of the students' level of involvement in oral exchanges within the school context.

As shown in Figure 5, the analysis of the responses reveals that the majority of participants have extensive professional experience. Indeed, nearly 81.7% have been teaching for more than ten years, with 41.7% having accumulated over twenty years of experience. The sample is thus composed mainly of seasoned teachers who can provide informed testimony on pedagogical and institutional realities.



**Figure 5:** Teaching experience (Years).

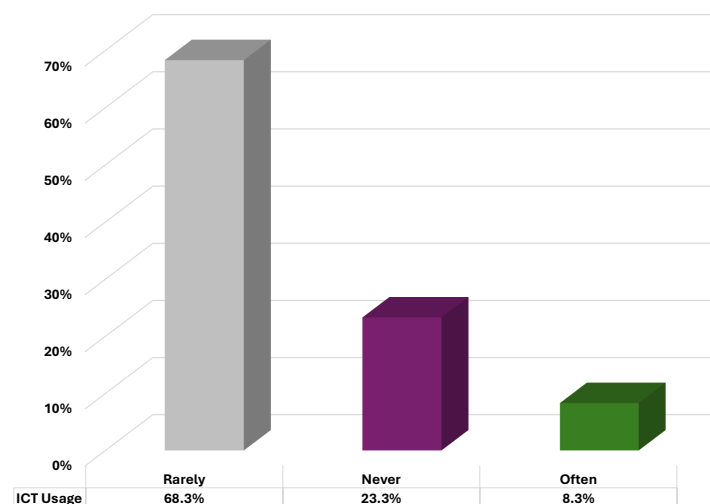


**Figure 6:** Teachers' participation in ICT training courses for oral language teaching.

The results in Figure 6 reveal limited participation in training courses dedicated to the use of Information and Communication Technologies (ICT) in oral teaching. In fact, only 31.7% of teachers report having benefited from such training, compared to 68.3% who have never attended such sessions.

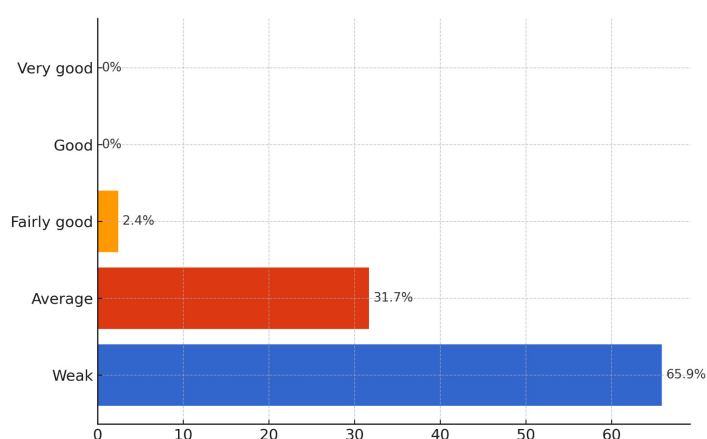
This majority proportion highlights a lack of continuing education in this area, which could hinder the effective integration of ICT into teaching practices.

The responses to the question regarding the use of information and communication technologies (ICT) for oral teaching highlight a significant proportion of teachers who report low integration of these tools into their teaching practices (Figure 7). In fact, a majority of participants (68.3%) say they rarely use them. This data reveals that their use is sporadic and unsystematic, relegating ICT to the status of complementary resources rather than central tools in oral language teaching. Furthermore, nearly a quarter of respondents (23.3%) indicated that they never use ICT in this area. Finally, only 8.3% of participants said they use ICT frequently. This very low percentage reflects the still marginal use of digital resources for the development of oral skills.



**Figure 7:** Frequency of ICT use in oral language teaching.

The results of teachers' observations on students' level of oral interaction are shown in Figure 8; A majority of teachers (65.9%) consider this interaction to be *low*, while 31.7% rate it as *average*. Only a very small proportion (2.4%) consider it to be *fairly good*, and no respondents chose the options *good* or *very good*. These results show that, overall, students participate little in oral activities and that interaction remains limited.



**Figure 8:** Teachers' ratings of students' oral interaction level.

The results of our survey show that learners' level of oral interaction remains low, which contrasts with the objectives set by recent educational reforms. These aim to develop students' language skills, enabling them to express themselves effectively in a society marked by constant change, particularly in

terms of technology.

Analysis of the graphs shows that the majority of teachers have not received training in the integration of ICT into oral teaching. A large proportion say they do not use these technologies. This situation contrasts with contemporary teaching approaches, which encourage the use of digital technology to promote the development of students' oral interaction skills, given the advantages of these tools, particularly for Generation Z. This observation raises a central question: to what extent do textbooks integrate digital tools into their proposed oral activities? Such integration is all the more essential as these tools serve as a key lever for developing learners' oral interaction skills.

This study aims to assess the role of digital technology in the teaching of oral expression, specifically to determine whether the designers of the *Passerelle Français* textbook have incorporated its pedagogical potential into the design of oral activities, in line with current didactic guidelines.

## 5.2. Critical analysis of the textbook

The objectives set for this course do not encourage the development of oral interaction.

*The first objective* is to find information in an interview, which reduces the activity to a spotting exercise. Listening is geared towards identifying specific elements, without encouraging active listening that could prompt a discussion or exchange between peers.

*The second objective* - to ask and give one's opinion about one's village or town - calls for unilateral language acts. The student expresses his/her point of view, but there is no joint construction of meaning or real dialogue. Speech remains individual, non-negotiated, and not part of an interactional dynamic, which is central to the teaching of oral expression today.

The first stage of the course, entitled "*I listen and I discover*", reinforces this logic of a less interactive oral. Students are invited to listen to an interview and extract specific information. The activity is therefore limited to selective comprehension, focused on identification, and does not give rise to any language exchange. The interview, presented in the form of an audio support listened to by the student, is not exploited to its full pedagogical potential. Indeed, it serves neither as a starting point for debate, nor as a basis for designing interactive tasks involving genuine oral engagement on the part of the learner. The learner remains essentially receptive and passive. What's more, the activities on offer do not encourage collaborative work or group exchanges. As for the integration of digital technology, this is limited to the simple broadcasting of this audio recording, without recourse to interactive or collaborative tools likely to enrich the learning experience. As a result, a valuable opportunity for pedagogical innovation is left unexploited.

The second stage, entitled "*I apply and transfer*", is also based on an individual approach. Students are asked to find four photographs representing places they like in their school, town or region. They locate and describe them, then justify their choice. This activity, while requiring descriptive and argumentative skills, remains devoid of any interactional dimension: each student works individually, without interacting with his or her peers. The use of the Internet is strictly limited to searching for images, without recourse to devices that encourage cooperation or exchange. As a result, neither the nature of the task nor the way in which it is carried out contribute to the achievement of contemporary objectives in the didactics of oral skills, which are based on interaction and collaboration.

## 6. Limitations and future work

The results of this study must be treated with caution, as the corpus of analysis remains limited. This limitation precludes any generalization of the findings, especially as other variables deserve to be taken into account, in particular the role of the teacher, whose pedagogical practices have a decisive influence on learning. Indeed, the effectiveness of a didactic device depends not only on the media used, but also on the way in which digital technologies are integrated into the teaching sequence. The interest of our research lies above all in the scope it offers, opening up new perspectives for further work, particularly in the field of teacher training. It would be appropriate to examine the extent to which the professional training they receive prepares them to integrate digital tools into the teaching of oral expression in a

relevant and thoughtful way, in line with contemporary pedagogical paradigms based on collaboration and mastery of interaction.

The integration of digital technology into teaching cannot be limited to a technical use designed to disseminate knowledge; it requires a thoughtful approach, based on pedagogical objectives and learner needs. Indeed, the impact of ICT on learning depends much more on how it is implemented than on its mere presence in the classroom. As Hubbard points out: *"The integration of ICT into pedagogical practices is strongly linked to the training of language teachers, since they are the central actors as they choose the tools to support their teaching, determine which mediated devices their learners are exposed to, and how these tools are used"* [23].

## 7. Conclusions

The profound changes in the demands of the social and professional world have considerably redefined the aims and objectives of school education. Against this backdrop, schools must revise their aims and adapt their teaching content to better prepare students for these new expectations. In particular, the development of interaction skills is a major challenge if learners are to be fully integrated into the social and professional spheres. This dynamic is closely linked to the growing integration of digital technologies, which play a key role in reinforcing this skill. The judicious use of technological tools is essential for training individuals capable of evolving with ease in a constantly changing digital environment.

In the teaching of French as a foreign language, this evolution is reflected in a refocusing on interaction as a fundamental skill, notably through the adoption of a new concept of teaching and learning oral expression: learning to interact by interacting. However, while this orientation is valued in the official programs, which encourage the use of digital technologies in the service of collaborative and interactional pedagogy, it appears that this approach is still not very effective, at least in the *Passerelle Français textbook*, intended for the 3<sup>e</sup> year of the college cycle, which has been analyzed. The absence of collaborative tasks, and the under-exploitation of the interactive potential offered by digital technology, are major obstacles to the development of interactional skills in the language classroom. This mismatch between current didactic and pedagogical foundations and the reality of oral activities proposed in the textbook appears to be a determining factor in the deficit of student interaction in the classroom, particularly among Generation Z.

It is therefore imperative to rethink pedagogical scenarios by fully integrating digital tools, according to a resolutely socio-constructivist approach, in order to encourage the active engagement of learners and reinforce language interactions. Indeed, as Hubbard points out, *"ICT has the potential not only to renew certain pedagogical postures, but also to move practices towards socio-constructivist and interactionist models of learning"* [23]. Moreover, it is important to emphasize the central role of the teacher, whose technopedagogical training constitutes a sine qua non for the genuine transformation of classroom practices. It is through this expert mediation that technologies can fully contribute to the development of oral interactional skills.

## Declaration on Generative AI

The authors have not employed any Generative AI tools.

## References

- [1] A. Cherbonnier, B. Hemon, N. Michinov, E. Jamet, E. Michinov, Collaborative skills training using digital tools: A systematic literature review, *International Journal of Human-Computer Interaction* 41 (2025) 4155–4173.

- [2] D. Wegner, A. B. da Silveira, D. Marconatto, M. Mitrega, A systematic review of collaborative digital platforms: structuring the domain and research agenda, *Review of Managerial Science* 18 (2024) 2663–2695.
- [3] C. Ugwu, J. Ekere, C. Onoh, Research paradigms and methodological choices in the research process, *Journal of Applied Information Science and Technology* 14 (2021) 116–124.
- [4] C. K. Ly, Teachers' roles on english language teaching for promoting learner-centered language learning: A theoretical review, *International Journal of TESOL & Education* 4 (2024) 78–98.
- [5] M. Warschauer, C. Meskill, Technology and second language teaching, in: *Handbook of undergraduate second language education*, Routledge, 2013, pp. 303–318.
- [6] N. Guichon, *Vers l'intégration des TIC dans l'enseignement des langues-ebook*, Didier, 2012.
- [7] J. Piaget, *La construction du réel chez l'enfant*, 5<sup>e</sup> édition, réimpression ed., Delachaux et Niestlé, Paris, 1973. ISBN 978-2603007369.
- [8] J. S. Bruner, *Toward a theory of instruction*, Harvard university press, 1974.
- [9] J. Bruner, *The culture of education*, harvard univ, 1996.
- [10] G. Salomon, *Distributed cognitions: Psychological and educational considerations*, Cambridge University Press, 1997.
- [11] D. Hymes, J. Pride, J. Holmes, On communicative competence. *sociolinguistics*, Eds. Pride, JB y J. Holmes (1972) 269–293.
- [12] N. Nomura, K. Matsuno, T. Muranaka, J. Tomita, How does time flow in living systems? retrocausal scaffolding and e-series time, *Biosemiotics* 12 (2019) 267–287.
- [13] S. Bissonnette, M. Richard, *Comment construire des compétences en classe*, Chenelière/Mac Graw-Hill (2001).
- [14] J. P. Cuq, et al., *Dictionnaire de didactique du français langue étrangère et seconde* (2003).
- [15] K. Slimani, R. Messoussi, S. Bourekadi, S. Khouli, An intelligent system solution for improving the distance collaborative work, in: *2017 Intelligent Systems and Computer Vision (ISCV)*, IEEE, 2017, pp. 1–4.
- [16] J. Tardif, A. Presseau, *Intégrer les nouvelles technologies de l'information : quel cadre pédagogique ?*, ESF éditeur, 1998. ISBN 2-7101-1291-4.
- [17] O. Arefieva, S. Piletska, V. Khaustova, Z. Poberezhna, D. Zyz, Monitoring the economic stability of the company's business processes as a prerequisite for sustainable development: investment and security aspects, in: *IOP Conference Series: Earth and Environmental Science*, volume 628, IOP Publishing, 2021, p. 012042.
- [18] M. Ul Hassan, A. Murtaza, K. Rashid, Redefining higher education institutions (heis) in the era of globalisation and global crises: A proposal for future sustainability, *European Journal of Education* 60 (2025) e12822.
- [19] R. F. Young, Interactional competence in language learning, teaching, and testing, in: *Handbook of research in second language teaching and learning*, Routledge, 2011, pp. 426–443.
- [20] B. Dominique, S. Yves, *La classe comme écosystème d'apprentissage: Le rôle des outils numériques*, *Recherches en didactique des langues et des cultures* 18 (2021).
- [21] C. de l'Europe, *Cadre européen commun de référence pour les langues: apprendre, enseigner, évaluer: Volume complémentaire*, Council of Europe, 2022.
- [22] A. Bouchikhi, M. Dali, R. Mansoum, A. Islah, *Passerelle français livret de l'apprenante et de l'apprenant 3ème année du cycle secondaire collégial*, 2023.
- [23] P. Hubbard, Call and the future of language teacher education, *CALICO journal* 25 (2008) 175–188.