

Exploring Multimedia Tools in Italian Language Education: Perspectives of Teachers, Educators and Adult Learners

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Abstract: - Recently, numerous studies have examined the use of digital applications in language teaching for both youth and adult education during and after the pandemic. Our study aims to identify the challenges faced by adults and the motivations driving them to learn foreign languages. Also, we assess their ability to utilize and benefit from modern technological advancements, especially in digital tools used in distant learning. The responses of 106 adult participants were analyzed using the SPSS statistical program, revealing various factors such as work development, personal interests, age, and individual characteristics unique to each participant. The findings indicate that there are significant gaps in adult education that warrant further exploration in future research, emphasizing the need for tailored approaches to address these unique adult learning needs.

Key-Words: - Multimedia tools, Italian language education, Teachers' perspectives, Educators' perspectives, Adult learners, Language teaching, Practice of Education in Digital applications, Foreign language learning Technological advancements in education, Adult education.

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1 Introduction

The continuous technological development and the demand for new skills in the workplace showcase the importance of lifelong learning for adults, [1]. Adult education and training contribute to the development of professional and social skills, offering stability and opportunities for professional and personal advancement in their lives through participation in educational programs, [2], [3].

The use of computers in education can be beneficial as an educational tool for both trainers and learners alike. However, effective use of these tools requires the careful selection, assessment, and adaptation of the appropriate educational applications and software. Modern studies have shown that computers often facilitate learning, [4], [5], but a lack of digital skills can hinder the widespread adoption of educational software, [6],

[7]. Researchers are examining possible correlations between cultural, social, and economic factors and the acceptance of digital tools in the educational process, [8]. Technology offers enhanced possibilities for teaching and learning multilingualism, supporting communication and globalization. In particular, foreign language education enhances trade relations and social inclusion, as reflected in the Greece-Italy relationship, [9].

The results of our research may help understand both the motivations and constraints affecting participation in distance education programs similar to recent studies, [10], [11], [12], [13]. Specifically, this research focuses on the impact of technology on adult Italian language learning, investigating the motivations and barriers faced by instructors and learners. The practical contribution of this research

lies in advancing language learning and creating educational materials for adults, whether or not they use digital tools.

More specifically, our study examines how multimedia tools affect adult learners studying Italian. We'll first build a foundation by looking at existing research on digital learning applications and how adults learn languages. Next, we'll delve into the technical aspects, outlining our research question, the technology used, the number of participants, and how we'll analyze the data. By exploring the motivations and challenges faced by both teachers and learners, this research aims to uncover how digital applications can improve language learning and encourage lifelong learning.

Lastly, we analyze responses from 106 participants using a statistical program to identify key factors affecting how well these tools are received and how effective they are. Our study aims to present our data analysis to assist future researchers in developing better educational strategies and materials, allowing adult learners to achieve their Italian language goals.

2 Theoretical Framework

2.1 Literature Review

The evolution of computers from their initial appearance to their current form is a remarkable journey through the world of technology. This evolution has revolutionized many areas, including society, the economy, education, and science, [14]. While the benefits of integrating computers into these fields are enormous, there are also significant dilemmas. On the one hand, technology allows for more efficient performance of daily activities and facilitates progress in various domains. On the other hand, concerns about issues such as privacy, cybersecurity, and dependence on technology arise, [15], [16]. Therefore, it is important to address the challenges associated with its use. According to multiple sources, [17], [18], [19], a teacher who is unaware of the possibilities offered by Information and Communication Technologies (ICT) risks functioning as illiterate. ICT encompasses all educational and cultural products and services that involve the use of various media and can be accessed through television or computers, [20], [21], [22], [23], [24], [25], [26], [27]. The role of a teacher must be to apply teaching methods and combine them with modern technological tools, ultimately aiming to design lessons that achieve the best possible educational outcomes.

In the context of educational technology, various software programs have been developed over time to serve different educational objectives and offer distinct capabilities. Among these, the Dartmouth system enabled students to interact with computers, [28], [29], while PLATO provided a rich teaching environment featuring graphics and feedback, [30], [31]. Additionally, the TICCIT system facilitated controlled teaching through the use of mini-computers and color television, [32], [33], [34].

Since the emergence of Computer-Assisted Language Learning (CALL) in the 1960s, [35], [36], [37], there has been a growing focus on language learning through specific programs. As technology advanced, these programs were enhanced, providing communicative and interactive exercises for language teaching. Later, the advent of Massive Open Online Courses (MOOCs) further promoted user participation in learning by offering free internet access and thus harvesting open learning opportunities, [38], [39].

The use of technology has significantly advanced the concept of distance education, offering a variety of possibilities for teaching and learning. Technological development has enabled learners to study educational material individually, even outside the traditional educational institution setting, [40].

Furthermore, it is important to note the advantages and disadvantages of distance education, [41], [42], [43], [43], [44]. In modern e-learning, [45], [46], communication occurs in real-time but requires the simultaneous availability of participants. In asynchronous tele-education, learners have flexibility in attendance time but cannot exchange information instantly, [47], [48], [49]. Combining these two formats offers flexibility and choices for participants. For distance learning to be effective, certain conditions and criteria must be met, [50], [51]. Both teachers and students need to have access to the necessary technological tools and be familiar with their use, as this plays a crucial role in the success of distance learning.

When studying language learning, whether at a distance or face-to-face, one should focus on various theoretical frameworks. The Theory of Behaviorism, [52], [53], suggests that language learning is a matter of imitation and habit formation. The Theory of Inheritance, [54], [55], [56], suggests a genetic basis for language acquisition, supported by the existence of a pre-existing apparatus in humans. The Cognitive Theory presents language as a product of cognitive abilities, [57], [58]. Finally, the Theory of Epistemology, or Constructivism,

[59], [60], emphasizes the role of the language environment in the development of language skills.

2.2 Aims and Objectives

The present study investigates the Italian language, focusing on its learning and the methods employed, particularly the technological means and applications that facilitate language acquisition. This choice is influenced by the historical presence of the Italian language in Greece since the Venetian and Enlightenment periods, as well as the mutual influences between Italian and Greek. There is limited research in the international literature on the learning of Italian as a foreign language and the digital tools used in its acquisition. Considering this, it is essential to briefly examine digital tool applications for language teaching, which can be divided into three categories:

- a) practice exercise applications such as Hot Potatoes
- b) multimedia card applications that aid in memory and vocabulary comprehension
- c) material construction applications that promote participatory teaching

As such, digital literacy is crucial for effectively using these applications, allowing for flexible and efficient problem-solving and information management.

2.3 Digital Tools for E-Learning Foreign Languages

Finally, online platforms and applications offer a wide range of tools for learning Italian and other foreign languages, each with its unique characteristics and advantages, making them suitable for different preferences and learning needs. Here are a few notable examples:

- *Kahoot!*: A popular learning platform that offers fun games and quizzes that encourage student participation and promote fun while learning, [61].
- *Wordwall.net*: A platform that allows users to create a variety of games and activities for language learning, providing ready-made templates for easy use, [62].
- *Padlet*: An information-gathering and collaborative tool that allows students and teachers to share content and collaborate on learning efforts, [63].
- *ClassDojo*: A platform that allows students and teachers to share content and collaborate on learning efforts, [64].
- *Babbel & Duolingo*: popular apps that offer structured language learning programs with

a variety of activities and games, [65], [66], [67], [68].

- *Busuu & Rosetta Stone*: companies that offer language learning platforms with a focus on audiovisual learning and the development of listening skills, [69], [70], [71], [72], [73].

Each application or platform has its advantages and disadvantages and may be suitable for different types of learners and educational environments. As a result, choosing the right platform depends on the learner's preferences, needs, and level.

2.4 MOOC and Multimedia Tools in Education

The development of online digital education has favored the development of a variety of platforms and introduced important changes in the way we perceive education. The development of Massive Open Online Courses (MOOCs) is pushing changes in the educational process as they promote openness of learning. MOOCs contribute to almost unlimited user participation through open access to the Internet at minimal or no cost by promoting collaborative learning. According to [74], there is a need for continued research in the field of open online learning to provide wider access to education which can become "the property of every citizen of the earth without racial, demographic, geographical, economic and cultural barriers".

The use of multimedia in education, especially in teaching a second foreign language, has significantly evolved and become an integral part of modern pedagogy. Over the years, multimedia applications have effectively and dynamically penetrated our educational systems. These applications enable the combined use of images, sound, and motion, offering comprehensive educational experiences that significantly enhance students' language skills through a coordinated process involving multiple media.

Multimedia tools are pivotal in the teaching process, providing dynamism and engagement in lessons. According to various studies such as [75], [76], [77], utilizing a diverse range of media—from traditional print to advanced multimedia computer tools—contributes to successful language instruction. Teachers continuously strive to update and diversify their teaching methods, integrating various media to create an enriched learning experience. Furthermore, the combination of multimedia with interactive elements (interactive multimedia) fosters the development of analytical and reading skills through multisensory engagement. As a result, this integration of these

elements not only aids in the understanding and memorization of knowledge but also encourages a deeper, more engaging learning process.

2.5 Multimedia Tools in Education: Hypertext

The concept of hypertext is intricately linked to multimedia, referring to a system of hyperlinks connecting words, phrases, graphics, and other elements within a text. Hypertext activates a linking mechanism designed to reveal new information and facilitate the sharing of documents among users, regardless of their location. This capability enhances the dynamic and interconnected nature of educational content. Specifically, the hypermedia function extends the capabilities of hypertext by allowing users to navigate seamlessly from one piece of information to another, even when these pieces are stored on different media. This functionality not only enriches the user experience but also broadens the scope of accessible information.

According to the study, [78], [79], hypertext is particularly valuable for accessing information rather than for direct instruction. This suggests that while hypertext and hypermedia are powerful tools for exploring and retrieving information, they are most effective when used in conjunction with other instructional methods to provide a well-rounded educational experience.

2.6 Theory of Adult Education

Undoubtedly, adult education has significantly intensified the direct integration of multimedia into the teaching process, attracting adult learners through its engaging presence. According to [80], [81], [82], [83], adult education encompasses any planned learning activity undertaken by individuals beyond the juvenile stage of education. These individuals aim to develop their skills, enrich their knowledge, and improve their technical and vocational training. As such, they contribute to their comprehensive personal, social, economic, and cultural development.

The primary factors driving adults to engage in lifelong learning, which is synonymous with adult education, include job and economic instability. This contrasts with the motivations of continuing unfulfilled formal education and pursuing personal improvement. In the mid-1990s, the Adult Learning Theory, or Andragogy, was developed by [84], focusing on how adults learn differently from children, [85]. This theory was followed by Education for Social Change model which emphasizes critical reflection and exploring central

themes through dialogue between instructors and learners, [86], [87], [88], [89].

Additionally, Jack Mezirow's Transformative Learning Theory stresses the importance of structuring adult learning and understanding the processes of perceiving and interpreting experiences, [90], [91], [92]. These theories collectively highlight the distinct nature of adult learning, emphasizing the need for a reflective, experiential, and transformative approach facilitated effectively through multimedia integration.

In addition, it is essential to emphasize the unique characteristics of adults that significantly influence their education. Notably, studies, [93] and [94], observe that "the cognitive or social behavior of individuals is not independent of the educational and social systems in which they operate and is also influenced by learning and social personal experiences." This means that adult learners bring a wealth of life experiences and established cognitive frameworks to the educational environment, which shapes their learning processes.

Given these characteristics, teachers and educators must be particularly attentive and insightful, considering the distinct needs and expectations of adult learners, which differ markedly from those of children. This showcases the need to foster an environment of trust and mutually respectful communication during each course/session. Teachers should be flexible and adaptable in their teaching methods to align with the preferences of their adult students.

According to the theories of transformative learning and social change, the teacher's role should be multifaceted. They should function as:

1. **The Animator:** engaging and motivating students through dynamic and interactive methods
2. **The Educator:** providing knowledge and facilitating learning through structured yet flexible approaches
3. **The Shaper of the Educational Process:** guiding and adapting the educational experience to meet the evolving needs of adult learners

Finally, teachers need to evaluate their students appropriately, ensuring that assessments are fair and reflective of the learners' progress and understanding. Additionally, teachers should continuously evaluate and develop their skills through professional development programs. This self-evaluation and commitment to ongoing training ensure that they remain effective and responsive educators, capable of meeting the diverse needs of adult learners.

3 Technical Framework

3.1 Research Hypothesis

Our case study investigated the following research questions:

1. **Views on Digital Learning Applications:** what are the perspectives of both teachers and adult learners regarding the use of digital educational applications?
2. **Distance Education and Technology:** how do teachers perceive the use of digital educational applications specifically in distance learning environments?
3. **Cognitive Impact:** to what extent and in what areas do digital educational applications enhance the cognitive abilities of adult learners?
4. **Challenges and Demographics:** what problems do adults face when using digital educational applications, and how do these challenges correlate with their demographic characteristics (e.g., economic background, education level, age)?
5. **Foreign Language Learning Preferences:** what are the preferred learning methods and motivations of adult learners when studying a foreign language, and how do these preferences correlate with their demographic characteristics (e.g., economic background, education level, age)?

3.2 Technical Contribution

This paper presents original research as our case study's results are collected directly from a specifically designed questionnaire, ensuring that the data are unique and not derived from any other sources. The questionnaire was crafted with the design principle to be simple and comprehensible to all participants, adhering strictly to ethical guidelines and ensuring the preservation of personal data.

The survey employs a combination of qualitative and quantitative research methodologies. While the research primarily focuses on qualitative aspects, the collected data have been quantified and analyzed using the statistical software SPSS to enhance the robustness of the findings. Lastly, a questionnaire created in Google Forms was initially shared and this tool served as the methodological tool for this research.

The objective of our study was to gain insights into the experiences and opinions of both teachers and learners regarding the use and application of Information and Communication Technology (ICT) in the process of learning the Italian language. This

dual approach provided a comprehensive understanding of the impact and effectiveness of ICT in language education.

3.3 Sample Size

The sample for this study consisted of 106 participants, selected randomly. The survey included 25 questions and was conducted over approximately a month. While 107 participants initially engaged with the survey, one participant's responses were excluded because they did not complete the questionnaire before it was closed.

Moreover, it is worth stating that participants generally answered all the questions, except one question that was left unanswered by four participants. This particular question pertained to the level of language proficiency, likely because these participants did not have a certified level in the language and were still in the learning stage.

Remarkably, all participants completed the questionnaire, which is uncommon as there is often a drop-off towards the end of lengthy surveys due to respondent fatigue. To avoid this, no answers were set as compulsory, allowing participants the freedom to submit the questionnaire without answering all questions. This approach proved effective, as it minimized the perception of the survey being tedious, resulting in nearly complete responses from all participants, aside from the aforementioned question left unanswered by four individuals.

3.4 Data Mining and Analysis

Looking at our sampling demographic data, it is evident that the majority of the respondents were women, comprising 83% (88 participants), while men constituted 17% (18 participants). This distribution highlights a shift from the traditional stereotype that technology use was predominantly associated with men. It suggests that the integration of ICT in classrooms has reduced gender disparities in technology usage.

Regarding occupation, the participants are categorized as follows: 36 are civil servants, 28 are freelancers, and 17% (9 people each) are either unemployed or students. Additionally, 6 participants fall into the "other" category. This distribution underscores the importance of focusing on digital environments for teaching and learning Italian, as these environments cater to a diverse range of professional backgrounds.

In terms of age, the distribution is as follows:

- Ages 18-29: 27 participants
- Ages 30-41: 25 participants
- Ages 42-53: 43 participants

- Ages 54-65: 11 participants

Given the wide communicative range, we correlated age with the motivations and barriers that influence adults' use of technology in learning Italian. These correlations provide valuable insights into how different age groups interact with and perceive the use of ICT in language learning. The results of our study, which include these demographic correlations, are presented respectively in Figure 1 and Table 1 (Appendix).

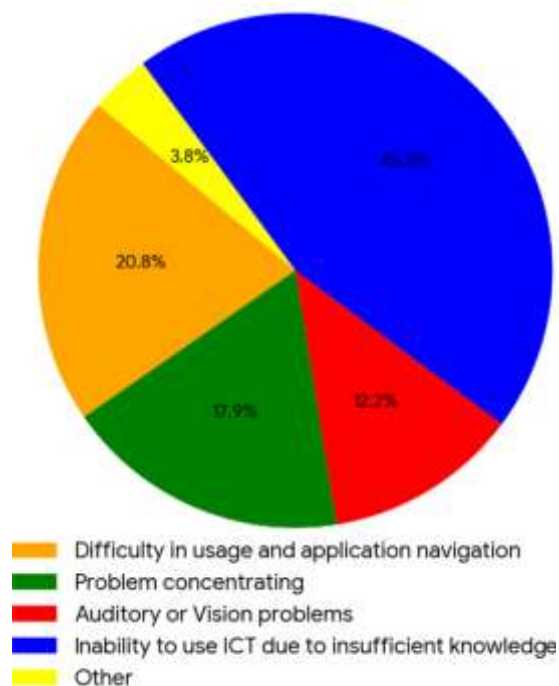


Fig. 1: Responses to the question: "What problems do adults face while using digital applications and the technology in general?"

3.4.1 Correlation between Age – Technical Issues

It might be expected that older generations would report more difficulty using ICT, but our findings indicate that individuals under 29 years old also experience significant challenges with digital media. This is truly surprising given that this younger generation is generally well-versed in digital technologies. In addition to these difficulties, this age group cites concentration problems as the second most significant factor hindering their learning improvement. Interestingly, none of the participants in the 54-65 age group consider a lack of concentration to be a barrier to learning a foreign language. One possible explanation for this discrepancy involves the design and functionality of most learning platforms. These platforms often have limited graphical and interactive capabilities

compared to the sophisticated applications that the 18-29 age group uses daily.

Consequently, the younger generation's expectations are not being met by the current educational technologies, leading to dissatisfaction and perceived barriers in their learning process. This mismatch between user expectations and the features offered by learning apps highlights the need for software developers to create more engaging and visually appealing educational tools that align with the preferences and habits of younger users (Figure 2).

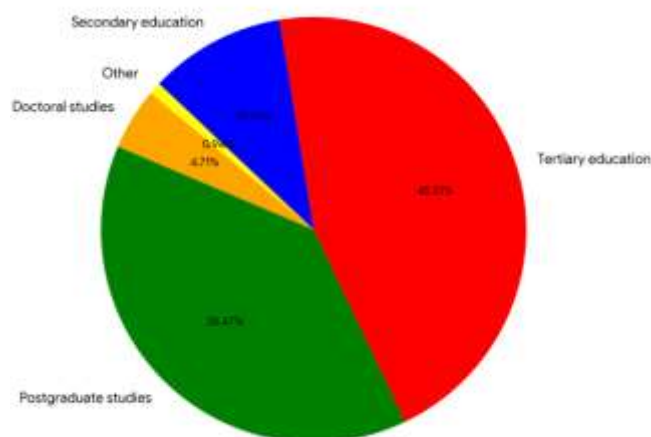


Fig. 2: Correlation between Age – Technical Issues to the sample size

3.4.2 Correlation between Motivators – Educational Background

Taking into account the educational background of the participants, we observe the following distribution:

- **Higher education graduates:** 45.51%
- **Postgraduate degree holders:** 38.47%
- **Secondary education graduates:** 10.37%
- **Doctoral degree holders:** 4.71%
- **Other:** Below 1%, with no specific details provided

This data was analyzed to understand the motivations that led participants to undertake Italian language learning and to determine whether their previous educational experiences influenced this decision.

The analysis of this graph addresses one of the key research questions: what are the main reasons that drive adults to learn a foreign language? This means that our question suggests that individuals with higher educational backgrounds are more likely to pursue further language education.

This could be attributed to several factors:

1. **Career Advancement:** higher education and postgraduate degree holders may seek to enhance their professional qualifications and marketability
2. **Intellectual Curiosity:** individuals with extensive educational backgrounds might have a greater inclination toward continuous learning and intellectual enrichment
3. **Cultural Interests:** exposure to diverse cultures during higher education can inspire language learning
4. **Academic Requirements:** doctoral and postgraduate students may need additional languages for research purposes

The motivations set were:

- a) professional development
- b) interest in learning
- c) improving communication skills
- d) developing social contacts
- e) educational preparation
- f) pursuing social stimuli

Overall, the educational background variable plays a significant role in shaping the motivations for learning a foreign language, as evidenced by the high percentages of participants with advanced degrees. This analysis highlights the importance of catering to the specific needs and motivations of adult learners in educational programs as presented in Figure 3.

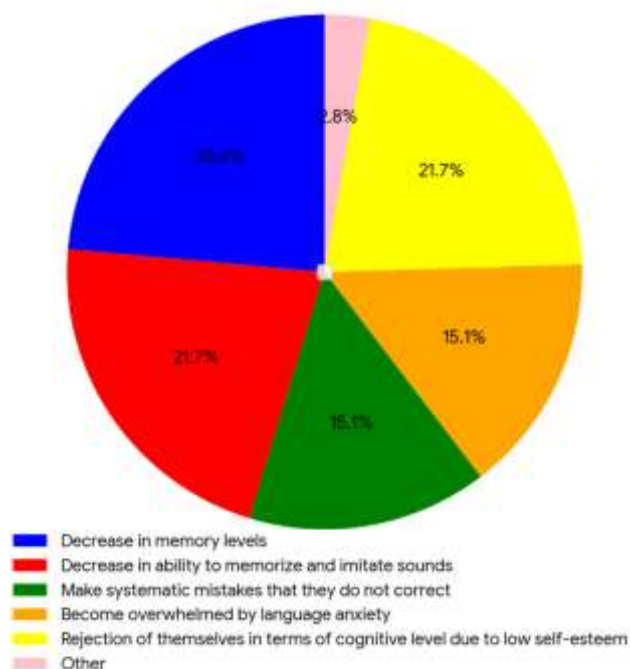


Fig. 2: Responses to the question: "What problems can an adult face when learning a foreign language?"

From Figure 3, it is evident that the problems faced by participants in learning Italian are varied and their responses exhibit considerable dispersion.

No single issue overwhelmingly dominates, but several significant concerns are apparent:

- **Reduced memory levels:** identified by 25 participants
- **Low self-esteem and self-rejection:** reported by 23 participants
- **Reduced ability to memorize and imitate sounds:** noted by 23 participants

These issues are prevalent among a significant portion of the participants, indicating that memory and self-perception challenges are common concerns.

Other factors such as language anxiety and systematic errors were also mentioned but have been reported in previous surveys and do not appear to be major causes for concern in this study. However, they still contribute to the overall picture of the challenges faced by adult learners.

When comparing these issues with inhibiting factors, common themes emerge:

- **Stress:** a major factor affecting adult learners, contributing to various learning difficulties
- **Lack of time:** many adults struggle to balance learning with other responsibilities, leading to insufficient study time
- **Insecurity:** feelings of inadequacy or fear of failure can hinder the learning process

These common denominators—stress, lack of time, and insecurity—underscore the need for supportive and flexible learning environments that can accommodate the unique challenges faced by adult learners. Addressing these factors can help mitigate the impact of the identified problems and facilitate a more effective and enjoyable language-learning experience.

3.4.3 Correlation between Technological Tools Used – Digital or Online Teaching Sessions

Our analysis findings are presented in Figure 4. Specifically, it is notable that the high ranking of YouTube, with 70% of participants using it for foreign language teaching, underscores the significance of video as a multimedia tool in the learning process. YouTube's popularity suggests that learners value the diverse range of educational content available on the platform, including language tutorials, cultural immersion videos, and authentic language materials. Zoom, with a usage rate of 68%, holds a similar position in popularity. Its presence highlights the increasing importance of virtual classrooms and online collaboration tools, especially in light of recent global events that have accelerated the adoption of remote learning.

Compared to other research findings, YouTube emerges as the most utilized teaching tool for foreign language learning, thanks to its vast library of educational resources. Similarly, Duolingo's popularity is notable, with over half of the participants reporting its use. Duolingo's gamified approach to language learning and accessibility across various devices likely contribute to its widespread adoption among learners.

In contrast, Busuu appears to have been used less frequently by participants. This could be due to factors such as limited awareness or perceived effectiveness compared to other language learning platforms.

Overall, these findings highlight the importance of leveraging multimedia tools like YouTube and interactive platforms like Duolingo in language education. These tools offer engaging and accessible ways for learners to practice language skills and engage with authentic language content, ultimately enhancing the learning experience.

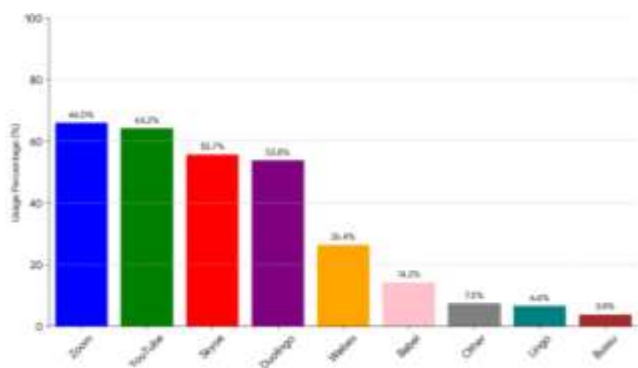


Fig. 3: Usage of e-digital tools, platforms, and online video-sharing platforms

3.4.4 The Main Question: “Which Digital Tool Did you use to Learn Italian”

The finding that 37% of participants use different digital tools not mentioned in the questionnaire underscores the diverse landscape of educational technology available to learners and instructors. This flexibility allows individuals to tailor their learning experiences to their specific needs and objectives, highlighting the adaptability of digital tools in supporting various learning styles and preferences.

While the distribution of answers for commonly known tools appears evenly spread, the lesser-known tool Padlet may not be as widely recognized among participants. This discrepancy can be attributed to the vast array of digital tools available, each with its unique features and functionalities. Learners and instructors may gravitate towards tools

they are familiar with or those that align closely with their preferred teaching or learning methods.

The use of various digital tools reflects the evolving nature of education in the digital age, where educators and learners have access to an abundance of resources to enhance teaching and learning outcomes. Ultimately, the key takeaway is that learners and instructors are leveraging a diverse range of digital tools to create engaging and effective learning experiences tailored to their individual needs and preferences.

4 Conclusion

In conclusion, the responses from the 106 participants affirm that the learning process has undergone a significant transformation, with multimedia software playing a decisive role in this change. This aligns with the European Union's objective of ensuring quality assurance in the education and training sector. The widespread use of audiovisual media and the combination of different digital tools and platforms, whether for distance learning, self-learning, or autonomous learning, are evident from the participants' answers.

Interestingly, issues such as insufficient knowledge of digital educational tools were not necessarily tied to age, as younger participants faced challenges in this regard more so than older adults. Similarly, lack of concentration was identified as a barrier mainly by younger participants, while older participants did not perceive it as such. Overall, participants expressed cautious optimism rather than outright negativity towards the use of ICT in education.

The findings suggest that various tele-education and practice platforms contribute to the use of audiovisual material and images, aiding learners with diverse needs and improving overall concentration. Practical issues such as internet connectivity and equipment pose challenges, indicating that the integration of digital platforms is still in its early stages.

Regarding motivations for learning a foreign language, the desire for professional and social development emerged as the primary motivation, followed by self-improvement and interest. The analysis underscores the importance of aligning the application of digital educational tools with learners' needs and preferences, with active participation from both learners and educators.

In essence, the research highlights the importance of accessible knowledge for collective and personal development, emphasizing the role of technology in facilitating inclusive and effective

learning experiences across diverse contexts and demographics.

Lastly, as for future research, it would be valuable to delve deeper into the specific challenges faced by different age groups in utilizing digital educational tools, as well as to explore strategies for addressing these challenges effectively. Additionally, investigating the long-term impact of multimedia-based language learning interventions on language proficiency and retention rates could provide valuable insights into the efficacy of such approaches.

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

During the preparation of this work the authors used Grammarly for language editing. After using this service, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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APPENDIX

Table 1. Statistical analysis to the responses to the question: “What problems do adults face while using digital applications and the technology in general?”

What problems do adults face while using digital applications and the technology in general?

			Inability to use Information and Communication Technologies due to insufficient knowledge	Auditory or Vision problems	Difficulty in Concentrating on a task	Difficulty in usage and application navigation	Total
Age	18 - 29	Sample Size	14	2	6	5	27
		% within this Age Range	51.9%	7.4%	22.2%	18.5%	100.0%
	30 - 41	Sample Size	12	5	4	4	25
		% within this Age Range	48.0%	20.0%	16.0%	16.0%	100.0%
	42 - 53	Sample Size	17	5	9	9	40
		% within this Age Range	42.5%	12.5%	22.5%	22.5%	100.0%
	54 - 65	Sample Size	5	1	0	4	10
		% within this Age Range	50.0%	10.0%	0.0%	40.0%	100.0%
Total	Sample Size	40	12	19	22	102	
	% within this Age Range	47.1%	12.7%	18.6%	21.6%	100.0%	