

Improving Students Listening Skills Through Visual Scratch Application: A practical implementation in *Réception Orale Élémentaire* Teaching

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Abstract. One crucial skill that plays a role, in students' success and personal development is the ability to listen effectively. However acquiring listening skills can be challenging, in today's digital age where distractions are abundant. Consequently educators are constantly searching for methods to enhance their students' listening abilities. One such approach is utilizing the Visual Scratch Application, a tool that combines visual programming to engage students in an immersive audio-visual learning journey. This article discusses the significance, advantages, pragmatic implementation methods, and some examples of practical implementation of how to use the application in teaching *Réception Orale Élémentaire*. Furthermore it delivers prospective future uses of the Visual Scratch Application, which has the potential to enhance students' listening abilities. By utilizing technology, educators can open up new possibilities for developing students' active and expert listening skills.

Keywords: application, listening, reception orale, skills, scratch, visual.

1 Introduction

Réception Orale is an important language skill in communication as it is a basic skill to be mastered at the beginning of learning. These language skills are skills that allow the learner to access other language skills in communication. Oral reception is one of the most difficult language skills for learners of French as a foreign language. Difficulty in the ability to speak French is also found in French language learners, especially at the middle level of French language students at Universitas Negeri Medan. This can be seen from the low score obtained by students who took the DELF (*Diplôme d'Etude en Langue Française*) on the *Compréhension orale* test level A1 to B1. Difficulty in the language skills of *Réception Orale* was found in the *Reception Oral Intermédiaire* class of *French Language Education* program students of the 2021 semester of the academic year 2022/2023. To solve this problem, the development of interactive learning materials based on *Scratch* visual programming is required in order to improve the student's learning outcomes on the *Réception Orale Élémentaire*. So far, there has been no development and use of the *Scratch* application in

learning French, especially in the *Réception Orale*. It was also one of the first reasons for the development of the interactive learning material *Réception Orale Élémentaire* based on Visual Scratch programming.

The Visual Scratch Application is an innovative application that uses a visually engaging and interactive platform to improve students' listening skills. It blends narrative and coding ideas, allowing students to build their own animations and stories using a simple drag-and-drop interface.

The inspiration for the Visual Scratch Application came from a desire to find a unique way to improve students listening skills. Recognizing the significance of listening in both academic and real-world contexts, we worked painstakingly to produce a user-friendly program that would make learning pleasurable and successful. The Visual Scratch Application has evolved into a powerful tool for honing this critical ability as a result of continual feedback and upgrades.

The advantage of Scratch lies in its practicality in creating simulations by users themselves actively through algorithm methods that are structured on the principle of box/puzzle. (Maloney et. al, 2010) ^[1]. Scratch facilitates users to understand material more deeply through simulation-making activities than other simulation content that only provides simulations that are already done (Husna et al., 2019) ^[2]. Implications of the advantages of scratch programming are that learning activities will be more demanding for students to learn to actively build thinking skills. In addition, Scratch can enhance problem-solving and creative thinking skills. (Lu, 2021) ^[3]. Rusilowati et al. 2020 ^[4] stated that Scratch-aided teaching materials provide an opportunity for learners to develop the concept of material into animation and involve learners in every use of scratch.

From its excellence sharpening problem-solving skills and creative thinking skills, it is comprehensible that many teachers especially in the field of Science develop material and media as well as using Scratch on learning in their classroom.

Satria, E. et al., (2022) ^[5] developed interactive animation media with Scratch programming to introduce computational thinking skills. Based on the results of the research, it can be concluded that the development of interactive animation media using block programming with the application Scratch for IPA material can be used as a learning medium in SD.

In learning Mathematics, Octavia, F. Z., & Yulianti, K. (2022) ^[6]. Developing Interactive Learning Multimedia based on Scratch on Materials Comparing Fragment Values. Research results show that the learning media is worthy of use and the learning medium is considered to facilitate mathematical learning on material comparing the fragment values.

Iskandar, R. S. F., & Raditya, A. (2017) ^[7] developed Project Based Learning with Scratch at the level of Elementary School in Tangerang and achieved good results.

In the learning of English at the secondary level, Sari, A. K., & Syafei, F. A. (2013) ^[8]. Developing Scratch-aided multimedia-based teaching materials. The use of Scratch in developing materials is expected to increase the interest of students in following the learning process.

In the field of *Pengabdian kepada Masyarakat*, Hardyanto, W., Wahyuni, S., Akhlis, I., & Sugiyanto, S. (2022) ^[9] carried out reinforcements for teachers included in the MGMP Physics High School of Batang district in the use of Scratch as a Digital Practice Simulation Solution in Pandemic Times. This activity is beneficial for teachers to develop knowledge and improve competence related to the main tasks as educators who are obliged to better prepare for the implementation of learning.

From some of the studies that have been done above it can be concluded that the development and use of interactive learning materials and media based on Audio Scratch programming is a

research that has a high value of novelty and a lot done in the learning of Science and Humanities. This was one of the first reasons why he developed an interactive learning material based on Audio Scratch programming.

2 Method

The research design employs a Research and Development (R&D) research design with Lee and Owens' (2004) ADDIE procedural model learning design scheme, with a model cycle consisting of analysis, design, development, implementation, and evaluation. The products are appraised using two assessment methods namely media evaluation and material evaluation.

3 Results and Discussion

Developing materials by using visual scratch application have given various contributions especially for teachers in managing their classes. Hereafter are some highlights of its role.

3.1 Importance of Listening Skills for Students

Listening abilities are critical for academic achievement. Students who actively listen in class are more likely to grasp vital information, comprehend complex concepts, and effectively retain knowledge. Furthermore, effective listening skills allow students to accurately follow instructions, engage in meaningful debates, and do better on exams and projects.

Strong listening skills have a huge impact on many parts of life outside of the classroom. Effective listening helps professionals develop solid connections with colleagues, understand clients' needs, and contribute to successful teamwork. Listening develops empathy, minimizes misconceptions, and enriches communication in personal relationships.

3.2 Understanding the Challenges in Developing Listening Skills

Due to several hurdles, developing strong listening skills might be difficult. Distractions, lack of focus, preconceived views, and the inclinations to interrupt or dominate conversations are examples of these. Overcoming these challenges necessitates self-awareness, patience, and a commitment to actively work on improving one's listening abilities.

Technological distractions pose extra hurdles to developing listening skills in today's digital world. Smartphones, social media, and other devices can easily divert attention and impede active listening. Recognizing and minimizing these distractions is critical for fully engaging in meaningful conversations and efficiently absorbing information.

3.3 Overview of Visual Scratch Application and Its Benefits

Visual Scratch Application provides a variety of features and functionalities to help students improve their listening skills. Students may effortlessly create animated stories, fascinating characters, and interactive dialogues using its simple drag-and-drop interface. The tool also allows students to record and playback audio, allowing them to practice listening to their own compositions.

This application has many advantages for increasing listening abilities. Its visual and interactive character captures the attention of pupils, making learning entertaining and engaging. Students are motivated to listen intently to ensure their inventions make sense by

actively participating in tale production. The tool also allows for peer collaboration, promoting communication and teamwork. Overall, the Visual Scratch Application provides a unique and effective alternative for students to learn critical listening skills while having fun. Simultaneously Scratch can be tailored to various grade levels. Its adaptability enables teachers to tailor activities and information to their students' individual needs and skills. Visual Scratch Application can be adjusted to give age-appropriate and relevant learning experiences that improve listening abilities for elementary, middle, and high school students. This application does not require prior programming experience from students. The application is designed to be user-friendly and intuitive, allowing students to interact with the content without the need for advanced programming abilities. It provides a visual interface that streamlines the process, making it accessible to students of diverse technical skill.

3.4 Strategies for Utilizing Visual Scratch Application to Improve Listening Skills

Effective communication and learning require good listening abilities. Students' listening skills can be improved in a fun and engaging way by introducing visual Scratch application into your lesson planning. Here are some ideas to consider.

Identify chances to add visual Scratch applications into your lecture plans. Create exercises in which students must listen to and follow directions while using the application. Scratch can be used to design interactive games in which students must listen to aural cues and respond by dragging and dropping objects.

Active listening is essential for comprehending and remembering information. By presenting visual cues that students must analyse and respond to, the Visual Scratch application helps promote active listening. Encourage students to pay attention to the instructions, aural cues, or dialogue provided by the application and reply appropriately. This will help students improve their listening abilities while also keeping them entertained.

The Visual Scratch Application immerses students in an audio-visual learning experience that combines visual programming and interactive components. This method attracts students' attention and encourages active listening as they interact with the program to absorb and respond to the information delivered. Visual Scratch Application improves understanding, retention, and critical thinking skills linked with good hearing by delivering a holistic learning experience.

3.5 Practical implementation of visual Scratch application in Classroom

Visual Scratch Application can realistically be introduced in the classroom as following instructions.

1. Become acquainted with the visual Scratch application and its features.
2. Explain the application's aim and benefits for developing listening skills to your students.
3. Provide a hands-on demonstration of the application's capability using a simple activity or game.
4. Allow students to explore the application alone or in small groups, encouraging them to experiment and become familiar with it.

Incorporate group activities and projects into your classes to make the most of the visual Scratch application. Assign tasks that necessitate student collaboration and communication while using the application. For example, you may have them construct interactive stories in which one student records the audio and the other students listen and respond. This will not only improve their listening abilities, but it will also encourage teamwork and creativity.

3.6 Evaluating the effectiveness of visual Scratch application in improving listening skills

It is critical to measure students' progress and collect data in order to determine the usefulness of the visual Scratch program in enhancing listening abilities. Considering the following strategies and metrics is advantageous:

1. Assessment Techniques and Metrics for Improving Listening Skills

Implement pre- and post-assessment procedures to examine individual students' listening skills before and after using the visual Scratch application. Students' participation and engagement can be observed throughout application-related activities. Consider using self-assessment methods, such as questionnaires or reflection tasks, to get student feedback on their listening ability.

2. Visual Scratch Application Implementation Case Studies and Success Stories

Look for case studies or success stories from other educators who have used the visual Scratch program to improve their students' listening abilities. Learning from their experiences and outcomes might offer you with important insights and suggestions for your own classroom. To promote further exploration and collaboration, share these experiences with colleagues or through professional development venues.

There are methods to assess the effectiveness of the Visual Scratch Application. Teachers have the option to employ evaluation techniques, like quizzes, exams and listening exercises that are tailored to the applications content. Additionally they can utilize the features of the Visual Scratch Application to gather feedback track students' progress and evaluate their understanding throughout the learning journey. This allows instructors to measure the influence of the Visual Scratch Application on students listening skills and make informed adjustments to enhance their learning experience.

3.7 Practical implementation of Scratch in *Réception Orale Élémentaire* Teaching

Here are some examples of implementing Scratch in *Réception Orale Élémentaire* teaching

A. Example of Scratch Activity for *Réception Orale*

Activity title: "*Conversation quotidienne*".

Objective: Improving students' hearing understanding of everyday discussions.

Description of the activity: Students listen to a daily conversation recorded in the target language (for example, a conversation between two friends discussing their weekend plans). After listening to the conversation, students are invited to answer questions about the subject of the conversation. They can record their responses and check whether they have understood the conversation correctly using Scratch blocks.

Resources: Audio recording of the conversation, understanding questions, Scratch blocks for recording answers.

Instructions for the teacher:

1. To begin, listen to the conversation with the students.
2. Distribute questions of understanding.
3. Ask students to work alone or in small groups to record their answers using Scratch blocks.
4. Students can replay the answers to check their understanding once they have been recorded.
5. Encourage students to share their comments on the conversation and discuss answers in class.

Tips: Encourage students to listen to the conversation several times for better understanding. You can include pronunciation exercises by asking students to repeat specific parts of the conversation.

B. Example of Scratch Module for Reception Orale Élémentaire Teaching

Title of modul: *“Explorer les Accents du Monde”*

Objective: Sensitize students to the different accents of the world to improve their oral understanding.

Description of the module: While listening to audio recordings from native speakers from different parts of the world, students use Scratch to explore various accents. They can choose the accents that are most familiar to them and listen to authentic speech examples using these accents. Quizzes are also included in the module to evaluate students' understanding.

Resources: World accent audio recordings, quiz activities, Scratch blocks for navigation and accent selection.

Instructions for the teacher:

1. Introduction of the module to students and explanation of the purpose of the activity.
2. Students can select a list of world accents and listen to associated audio recordings.
3. After listening to examples, students answer quizzes to evaluate their understanding.
4. Students can track their progress by recording the results of the quiz using Scratch blocks.
5. Encourage students to discuss their classroom experiences and explore various accents.

Tips: For a more realistic learning experience, use authentic recordings from native speakers. In addition, you can encourage students to share anecdotes about their interactions with people with different accents in real life.

C. Example of Scratch Module Assessment Grid

Title of Module: *“Amélioration de la Compréhension Orale Élémentaire avec Scratch”*

Evaluation criteria:

1. Hearing comprehension: Assess the student's ability to understand speech in a wide range of contexts.
2. Engagement and participation: Assess the active participation of students in Scratch activities and classroom discussions.
3. Creativity: Assess the student's creativity when creating Scratch projects related to *Compréhension Orale*.
4. Using Scratch: Evaluates the ability of students to use the scratch blocks to record responses and interact with the modules.

Scale of evaluation:

- 5: Excellent performance
- 4: Good performance
- 3: Satisfactory performance
- 2: Unsatisfactory performance
- 1: Very unsatisfactory performance.

4 Conclusions

Through interesting and interactive tasks, the Visual Scratch program offers a viable option for improving students' listening skills. You may assist students strengthen their listening skills while having fun by including this tool into your lesson design and properly applying it in the classroom. Contribute to the knowledge base and share your experiences as you explore the possibilities and gather statistics on its usefulness to further broaden the future scope of employing visual Scratch program for enhancing listening abilities.

Finally, the Visual Scratch Application provides a fantastic chance for educators to improve students' listening abilities in a fun and interactive way. Teachers may create a conducive environment for active listening and comprehension by adding this unique tool into lesson planning and classroom activities. Visual Scratch Application's advantages, such as its capacity to attract students' attention, foster critical thinking, and provide real-time feedback, make it a promising tool for enhancing listening abilities. As technology advances, there is enormous potential for further developments in using Visual Scratch Application and related technologies to foster excellent listening abilities in students. By embracing these tools and exploring their possibilities, instructors may provide students with a valuable skill set that goes far beyond the classroom.

In conclusion, using the Scratch app to teach listening skills has many advantages for students. Improving hearing comprehension, increasing student engagement and personalizing learning to individual needs is possible thanks to this innovative method. According to the findings of research conducted at Universitas Negeri Medan, Scratch can be an effective tool for developing this essential competence. Educators can prepare students to succeed in a world where effective communication is essential by including Scratch in educational programs.

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References

- [1] Maloney, J., Resnick, M., Rusk, N., Silverman, B., & Eastmond, E. The scratch programming language and environment. *ACM Transactions on Computing Education (TOCE)*, 10(4), 1-15 (2010)
- [2] Husna, A., Cahyono, E., & Fianti, F. The effect of project based learning model aided scratch media toward learning outcomes and creativity. *Journal of Innovative Science Education*, 8(1), 1-7 (2019)
- [3] Lu, Y. Scratch teaching mode of a course for college students. *International Journal of Emerging Technologies in Learning (IJET)*, 16(5), 186-200 (2021)
- [4] Rusilowati, A., Subali, B., Aji, M. P., & Negoro, R. A. Development of teaching materials for momentum assisted by scratch: building the pre-service teacher's skills for 21st century and industry revolution. In *Journal of Physics: Conference Series* (Vol. 1567, No. 2, p. 022010). IOP Publishing (2020)
- [5] Satria, E., Sa'ud, U. S., Sopandi, W., Rahayu, A. H., & Anggraeni, P. Pengembangan media animasi interaktif dengan pemograman scratch untuk mengenalkan keterampilan berpikir komputasional. *Jurnal Cerdas Proklamator*, 10(2), 116-127 (2022)
- [6] Octavia, F. Z., & Yulianti, K. Pengembangan Multimedia Pembelajaran Interaktif berbasis Scratch pada Materi Membandingkan Nilai Pecahan. *Buana Matematika: Jurnal Ilmiah Matematika dan Pendidikan Matematika*, 12(1), 83-94 (2022)
- [7] Iskandar, R. S. F., & Raditya, A. Pengembangan Bahan Ajar Projectbased Learning Berbantuan Scratch (2017)
- [8] Sari, A. K., & Syafei, A. F. Using Scratch to Create Multimedia-Based Material in Teaching English. *Journal of English Language Teaching*, 1(2), 39-47 (2013)
- [9] Hardyanto, W., Wahyuni, S., Akhlis, I., & Sugiyanto, S. Scratch Sebagai Solusi Simulasi Praktikum Digital di Masa Pandemi. *Journal of Community Empowerment*, 2(1), 07-11 (2022)
- [10] Lee, W. W., & Owens, D. L. *Multimedia-based instructional Design, (2nd Ed)*. San Francisco: Pfeiffer (2004)