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ARTICLE

Innovative Pedagogy and Technology in the Interaction between Students with Intellectual Disabilities and Inclusive Teachers in a Chilean Special School

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ABSTRACT

This article presents a new perspective on the integration of personalized teaching in the complementary subjects of art education and technological education, with the participation of an educational and vocational workshop (informal classroom) in a special school. The main objective is to analyze the inclusive interaction between young students with intellectual disabilities and a teacher with hearing impairments, facilitating their impact on the optimization of the educational process through strategic teaching, methodological adaptation, and artistic-digital teaching resources to the specific needs of each student. This method focused on a qualitative, experimental, and analytical approach, including a documentary review and personal cases from multiple sources on inclusive education and methodological adaptations for the creation of educational materials, integrating topics like healthy eating and art methodologies. This method focused on a qualitative, experimental, and analytical approach, with a documentary review and personal case study of various sources on educational inclusion and adapted teaching strategies for the creation of educational materials, integrating healthy eating topics and artistic methodologies into different didactic activities. The results consist of the variation to the study on the proposal 'Digital Adventures: Magical Nutrition for All' (in Spanish) to describe the context focused on food and nutrition education. The discussion focuses on various aspects of enhancing inclusive interaction toward innovative pedagogical practice and social integration through artistic and technological activities. In conclusion, some recommendations to

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advance inclusive labor and educational inclusion, regardless of their artistic and technological skills, on a healthy lifestyle.

Keywords: Art Education; Technology Education; Special Education School; Intellectual Disability; Inclusive Teaching; Hard-of-Hearing; After-School Workshop; Qualitative Study

1. Introduction

Currently, the hiring of personnel with disabilities in the educational field—whether in public, private, or mixed institutions—remains limited, restrictive, and exclusionary, focusing primarily on activities linked to curricular and formal programs. This situation hinders the implementation of truly personalized and inclusive teaching. This professional gap directly affects inclusive education [1] by restricting the active participation of professionals with disabilities in various roles and contexts within the school system. Although Chile has made legislative progress regarding the Employment Inclusion Law [2–4], it is still not fully implemented in educational institutions, and does not guarantee the effective integration of professionals with disabilities at all levels and functions of the system. Likewise, the curricular and methodological adaptations necessary to serve students with special educational needs (SEN) are not sufficiently promoting the quality and equity of all aspects of the educational service [5, 6].

This reality reflects the complexities and challenges faced by teachers with disabilities, particularly those with hearing impairments—such as those with hearing loss—within the school system. The lack of adequate support, specialized resources, and inclusive working conditions hinders their full participation and professional development. The existing gap between inclusion policies and their appropriate implementation continues to pose significant obstacles to building a truly inclusive educational environment for both teachers [7, 8] and students [9] with SEN. In light of this situation, it is essential that institutions and public policies strengthen the employment inclusion of people with disabilities, ensuring not only their access to employment but also their professional development and active participation in the educational field.

Inclusive mediation is not adequately recognized in school institutions in Chile, nor is the educational and social inclusion of students and teachers with sensory disabilities guaranteed. The lack of an inclusive education system hinders the creation of accessible spaces for functional diversity and inclusive mediation, negatively affecting the personal and social development of these students-teachers. Recommendations are proposed to the Ministry of Education and other Chilean government entities to address various issues, such as the increase in discrimination, lack of labor and educational well-being, absence of inclusive educational quality, lack of oversight in the implementation of the employment inclusion law, failure to ensure the participation of students without disabilities in inclusive processes, low participation in training programs on Chilean sign language and/or braille, lack of resources and technical support for teachers with hearing or visual disabilities, and the lack of adequate political management for inclusive education, especially in the interpretation of sign language and the use of technical aids in educational institutions [10].

It is very complex to incorporate ‘inclusive mediation’ (on the structure of a traditional duo model with inclusive mediator or inclusive duo [11, 12]) and its relationship with the inclusive educational system in Chile in precisely some cases of the school system through a series of complex situations (school failure, poor school performance, conflict in the classroom, school isolation, school bullying, etc.), supporting educational contextualization within the school to transmit a change in school diversity and the new generation of inclusive education. In this context, a debate emerges regarding the need to improve and adapt innovative pedagogical practices in inclusive schools, with an emphasis on a teaching approach that promotes attention to human diversity.

The School Inclusion Law does not always consider disability policy or the objectives of SEN, nor does it recognize the need for curricular adaptations for all students with functional diversity [13]. However, despite the efforts made under this law, the inclusion of students with disabilities in Chile still does not adequately address the necessary modifications in curriculum design for this group. This highlights

the importance of promoting greater social awareness about educational inclusion, particularly concerning teachers with sensory disabilities, to ensure a better future for young people with intellectual disabilities and, of course, with other types of cognitive disabilities and neurodiversity.

This study focuses on the interaction between students with intellectual disabilities and a teacher with hearing impairments in the classroom of a public special education school in Chile. This analysis is based on the activities carried out in the classroom. When developing the research, it seeks to understand the impact of innovative pedagogy and the use of new methodology adapted to the teaching and learning process of all students, considering their individual needs to improve their inclusion and educational development.

The central question of this study is: Is there interaction between students with intellectual disabilities and teachers with hearing impairments in the special education classroom? Analyzing this interaction is complex, as it involves understanding the personal experience of teachers in their inclusive role, particularly when working with students with varying degrees of intellectual disabilities, from mild to moderate and severe. This includes conditions, such as Down syndrome, Autism Spectrum Disorder (ASD), Fragile X syndrome, among other cognitive disabilities. The research focuses on informal activities that promote inclusion and social development, which allows for a deeper understanding of the specific needs of these students, considering both their individual capabilities and the type and degree of support required in terms of cognitive and adaptive skills.

The main objective is to analyze the inclusive interaction between young students with intellectual disabilities and a teacher with hearing impairments, facilitating their impact on the optimization of the educational process through strategic teaching, methodological adaptation, and artistic-digital teaching resources to the specific needs of each student.

2. Literature Review

In the field of inclusive education, progress in innovative pedagogies and the incorporation of adapted methodologies serve as key tools to promote equitable access to learning for all students, including those with intellectual disabilities[14–16]. However, in many contexts—particularly in special education schools—adapting the teaching methods and educational resources to meet the specific needs of each student remains one of the main challenges today, especially in settings where the teacher has a hearing impairment.

Innovative pedagogical strategies[12]—such as the use of visual, creative, and adaptive technological tools—allow for more personalized and accessible teaching. These methodologies not only facilitate communication but also promote active participation for students, regardless of their disability. In this regard, placing value on the educational model plays a crucial role in achieving more effective social integration, where students develop not only academic skills but also social ones. Cooperative learning, in this case, becomes a powerful tool, as it allows students to interact and support one another, fostering an inclusive environment and serving as an effective strategy to respect diversity in the classroom.

The role of teachers with hearing disabilities in the educational context plays an important part in the process of teaching art and technology to create an inclusive education model[17]. This involves the use of new content with adapted methodologies in special education classrooms through the design of educational programs based on competencies and objectives from the Chilean curriculum across all levels of schooling, from preschool to secondary education. Currently, there are no studies focused on the integration of students with disabilities into the educational experience through diversity and adaptability in the teaching-learning process.

Rather than being limited to the transmission of information, educational media should ensure that knowledge is accessible to all students[18]. Of course, teachers must play the role of learning facilitators, creating an environment that fosters exploration, questioning, and active student participation. Through their own experiences, teachers can guide students in developing more inclusive and empathetic attitudes, promoting a school culture based on respect, diversity, and collaboration. This change not only improves the educational process but also contributes to developing individuals who are more committed, both cognitively and emotionally, to social and cultural differences. This inclusive role approach requires a significant transformation in the traditional perception of teachers, moving from being simply a source of knowledge to becoming a facilitator. The experience and perspective of teachers with hearing impairments enrich the pedagogical

process, promoting a more inclusive and empathetic environment. Their role as facilitators is crucial in guiding students, including those with intellectual disabilities, while promoting attitudes of respect, collaboration, and acceptance. The presence of a teacher with a hearing impairment can serve as a motivating factor, for example, strength, overcoming capacity, personal growth, and positive adaptability, helping to create a truly inclusive learning environment that is sensitive to the diverse needs of students.

Regarding the use of adaptive technologies[19] in the classroom, such as specialized educational software, hearing support devices, and visual content, it has proven crucial for improving accessibility and comprehension for students with intellectual disabilities. These tools, as part of the complementary curriculum for art education and technology education, allow for the adaptation of the educational process and the adjustment of the learning process, ensuring that the content is understandable and relevant to each student—and, of course, at the pace of their peers—without compromising the quality of progress in skill development. The integration of these technologies not only enhances student autonomy but also supports teacher development, enabling them to adjust and diversify teaching strategies for more effective and inclusive instruction.

On the other hand, while Chile's School Inclusion Law has, in theory, laid the groundwork for greater equity in access to education, the implementation of effective policies still faces several obstacles. This study highlights the public policies for special education, focusing on the evolution of regulations toward a rights-based inclusive model, through a qualitative analysis of legal documents from the Ministry of Education for the purpose of identifying the key elements that can guide the creation and updating of inclusive policies, considering both current and repealed decrees[20]. The lack of professional training and specialized inclusive mediation for teachers, especially those with sensory disabilities, including Deaf individuals, as well as those who are blind or have low vision, and of course, intellectual disabilities in varying degrees, limits opportunities to offer high-quality inclusive education. Despite efforts in this area, a greater institutional commitment is needed to ensure that teachers, regardless of their disability, have the necessary tools to implement effective and inclusive education for students with intellectual disabilities.

This evidence supports the idea that social interaction between students with intellectual disabilities and their peers remains one of the key components of inclusive education. Social isolation continues to be a significant barrier in many schools, hindering the integration of students with SEN into the classroom. In this context, teacher-student collaboration and social integration through inclusive activities are crucial to overcoming the barriers of exclusion. This landscape suggests that there is still a long way to go in terms of implementing truly inclusive and effective pedagogy within the Chilean educational system. Despite legislative and public policy efforts, the full integration of students with intellectual disabilities into inclusive school environments is not yet fully guaranteed; and structural barriers continue to represent a considerable challenge.

In particular, the complementary subjects, both the art education (visual arts) and technological education (graphic design and digital technology), open up a space for different meanings. The projects involve active participation, such as the systematized principles of creative and expressive didactics in murals, posters, or thematic exhibitions, which allow students with intellectual disabilities to express their ideas and knowledge visually, overcoming potential limitations in verbal and non-verbal communication. Furthermore, these activities foster social collaboration and teamwork, helping to reduce isolation and strengthen the sense of belonging within the school environment. On the other hand, these art methodologies also serve as tools to address relevant topics, such as healthy eating, and to integrate curricular content in a practical and meaningful way. The joint development of visual projects not only helps in internalizing knowledge but also fosters socio-emotional skills, promoting a culture of respect and acceptance of diversity in the classroom.

Finally, although advances in legislation and public policies in Chile reflect a commitment to more inclusive education, the reality shows that significant challenges still exist in achieving full integration. Insufficient resources, a lack of ongoing training, and persistent structural barriers limit the effectiveness of these policies. Therefore, it is essential to strengthen the capacities of teaching staff, promote pedagogical innovation, and expand the use of adaptive methodologies that respond to the specific needs of students with disabilities, thus consolidating a truly inclusive and equitable educational environment.

3. Methods

This study focused on the working relationship at a public special education school during the year 2024, investigating the participation of two women—without disabilities—who were responsible for coordinating extracurricular workshops across various disciplines. A qualitative, experimental, and analytical approach was adopted, including a documentary review of multiple sources on inclusive education and methodological adaptations for students with intellectual disabilities.

Through a personal case study, the interaction between a teacher with hearing impairment and the students was explored, focusing on how the teacher promoted inclusion by adapting his teaching and his relationship to pedagogical work during classroom activities. The review of documents related to inclusive methodologies allowed for a deeper understanding of the impact of educational interventions on the teaching-learning process.

Regarding didactic activities, the creation of educational materials such as posters, murals, graphic projects, and exhibitions was included, integrating topics like healthy eating and art methodologies. These resources were adapted to meet the specific needs of each student, encouraging active participation and the development of practical, creative, and social skills.

The use of tools such as visual arts, graphic design, and digital technology allowed students with intellectual disabilities to express their ideas in an accessible and meaningful way, overcoming communication barriers. These activities were implemented differently in the educational and vocational Workshop at the Paul Harris Special School, located in Las Condes Municipality (Santiago, Chile), and they promoted social collaboration, helping to reduce isolation and strengthen a sense of belonging within the school community.

4. Results

The results correspond to the study on the educational proposal 'Digital Adventures: Magical Nutrition for All' (in Spanish), which describes the context focused on food and nutrition education aimed at students with intellectual disabilities. These innovative pedagogical approaches combine visual, creative, and adaptive technological tools to foster meaningful learning about active inclusion and the overall well-being of all students. The analysis of educational quality focuses on a cross-cutting and relevant topic, such as healthy eating, integrating curricular content in a creative and accessible way. This study promotes not only cognitive development but also the social skills of the participants.

However, underpinning these changes in innovative pedagogical practice, a series of methodological adaptations and artistic and digital teaching resources are proposed, key to a healthy and creative life cycle. They are divided into three stages to implement inclusive interaction through the role of a teacher with hearing impairments and students with intellectual disabilities.

4.1. Educational Planning Strategy

The first stage corresponds to a small format on the preliminary proposal **(Table 1)**. In the context of special education, several initiatives have been launched to create infographics promoting healthy living and the well-being of all students with intellectual disabilities. This qualitative study involves developing inclusive infographics as a creative and accessible space for educational nutrition. Just as the design of these goals takes into account the specific needs of the students, it uses visual resources such as paintings, photographs, digital effects, and simple text. These elements facilitate understanding through different learning mechanisms for all students, regardless of their cognitive or sensory abilities. Beyond their instructional value, these infographics play a key role in fostering autonomy and self-care among students and within their school community.

4.2. Educational Planning Activities

The next stage involves educational activities within the classroom, whose objective is to strengthen and motivate the teaching and learning process, such as inclusive interaction. The program consists of six modules over eight months, with one weekly one-hour session (**Tables 2** and **3**). This structure facilitates appropriate and flexible planning to improve adaptation to the pace and individual needs of each work.

4.3. Project Demonstration

The final stage consists of a series of didactic activities carried out in various modules, specifically where students participated, were motivated, and learned about the differ-

ent art and technological projects. By some examples of adapted methodologies and innovative pedagogies within the classroom.

Most students with intellectual disabilities took photos independently and edited them with effects of their own choosing using an app installed on the tablet (**Figures 1–3**). These activities were part of various free and creative exercises under the supervision of the teacher in charge.

Table 1. A small format on the preliminary proposal.

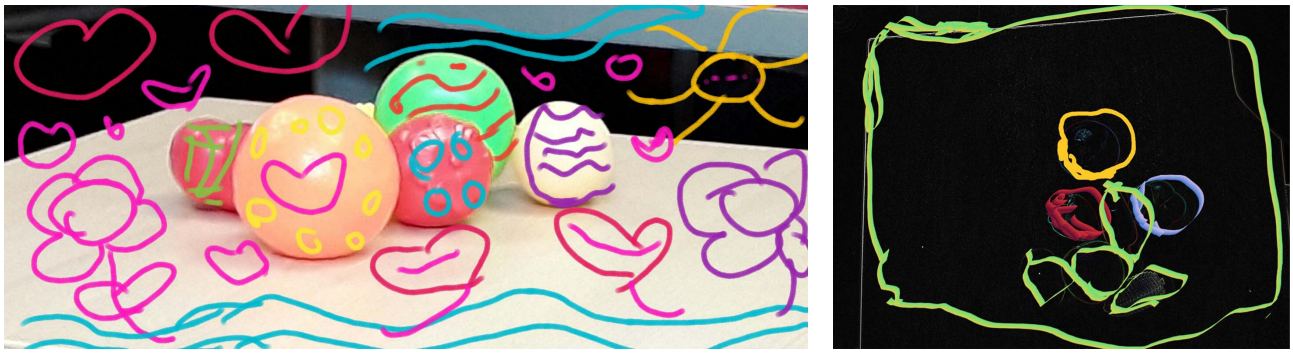
Proposal Name	Characteristic of the Proposal
Project Description	This project aims to engage young students with intellectual disabilities in both digital and hands-on experiences, where they can discover the world of healthy eating in a fun and creative way. Through comprehensive art and design activities, participants will explore nutritional concepts in an accessible and stimulating way, promoting healthy habits interestingly and engagingly.
Project Objectives	**General Objective:** To promote the understanding and adoption of healthy eating habits among students with intellectual disabilities by creating educational and creative experiences using manual and digital technology and integrated design. **Specific Objectives:** - To develop basic skills in the use of manual and digital technology and integrated design adapted to the needs and abilities of students with intellectual disabilities. - To stimulate curiosity and active exploration of concepts related to nutrition and healthy eating. - To encourage students' creative expression and self-expression through artistic projects focused on the themes of nutrition and health.
Goals	To create infographics to promote healthy living.
Indicators	- Search for images of healthy foods on the Internet. - Create one or more healthy eating slogans using manual-digital technology and integrated design. - Displays healthy food presentation and slogans through the use of manual-digital and comprehensive design.

Table 2. The list of modules for planning activities.

Activity Name	Contents
Module 1: Redrawing my favorite food	- Choosing an image of your favorite food - Redrawing or cropping the selected food - Painting and dripping with basic tools
Module 2: Creating my healthy food card	- Using a horizontal format with recycled materials of color or texture - Creating a slogan with two or three simple words - Cutting and pasting selected words from freely chosen texts - Painting, drawing, or adding images of healthy food
Module 3: Manipulating my chosen food	- Painting a colored background in a vertical format using a drawing pad - Creating 2D shapes of healthy food - Painting, cutting, and gluing short texts or messages as slogans in different styles
Module 4: Creating Motivational Posters	- Cutting out shapes to convey messages about healthy foods using different physical and recycled materials - Gluing food shapes onto laminated cardboard or wood - Writing a phrase in different orientations: vertical, horizontal, and diagonal
Module 5: Caring for the environment with healthy foods	- Choosing a group slogan about the food crisis - Selecting one or two images from the Internet - Freely designing using recycled materials or selected images on laminated cardboard or wood
Module 6: Creating a short poem about healthy living and school coexistence (or memory) from the School	- Creating and choosing a short poem about healthy living - Designing a simple brochure using a large drawing pad - Using recycled materials on the brochure - Adding recent images of school life (or memories) from School along with selected short poems - Printing or displaying the finished works for the end-of-school-year presentation

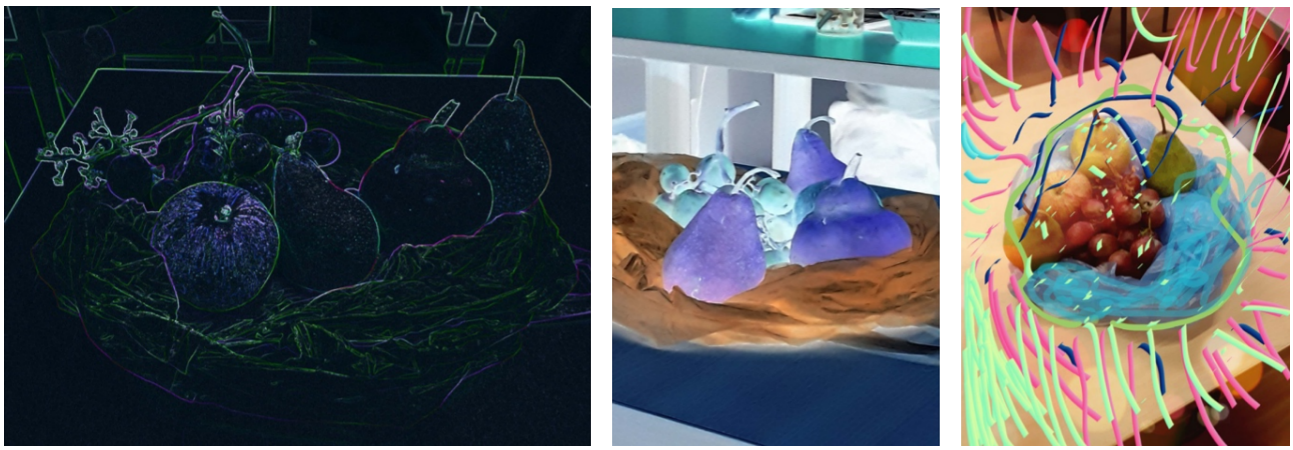
Table 3. Schedule of activities (Gantt Chart).

Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8
Mod. 1	X							
Mod. 2	X	X						
Mod. 3		X	X					
Mod. 4			X	X				
Mod. 5					X	X		
Mod. 6							X	X



(a) Students' Work 1. **(b)** Students' Work 2.

Figure 1. Demonstration of some image works created by students as part of creative and free practice, using the teaching material of Samsung Galaxy tablet together with plastic toys shaped like fruits and vegetables during the activity of Module 1 in the art and design workshop.



(a) Students' Work 3. **(b)** Students' Work 4. **(c)** Students' Work 5.

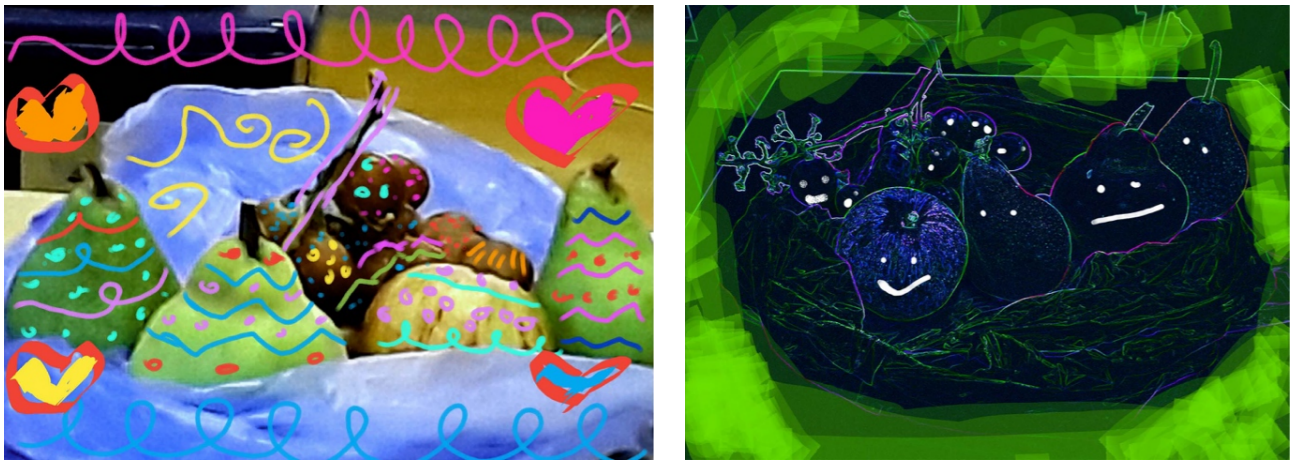
Figure 2. Another demonstration of works chosen by students as part of creative and free practice, using the Samsung Galaxy educational tablet teaching material together with the real vegetables during the Module 1 activity in the art and design workshop.

It is crucial to consider the combination of visual, creative, and adaptive technological tools. These include physical graphic designs promoting healthy eating as part of a specialized educational learning process, which developed new slogans using simpler language to foster understanding and build communication skills (**Figure 4**).

Another example, combining different activities, involves each student selecting their variation of fruits and vegetables on the digital whiteboard (**Figure 5a**) to make the 2D healthy eating teaching material. All students form two groups to choose the corresponding phrases and slogans. The two students with the most creative ability worked on the slogans selected by the group, highlighting the chosen materials: pencils and markers (**Figure 6a**). Meanwhile, each student molded

and painted several selected figures with white clay (paste) and paint (**Figures 5b,c**). The final result was the work of both groups on the recycled plywood material, along with the colorful molded figures and the two messages written in Spanish about food handling (**Figures 6b,c**). The addition of activity to offer the creation of graphic design as part of art photography, the education tablet by applying filters to images (**Figure 7**), is similar to the incorporation of activity in Module 1.

There are different ways for students with intellectual disabilities to express themselves, such as learning about other slogans about creating motivational posters. In the first step, students formed into two groups to begin choosing their own slogans. In each group, a volunteer student helps to write short, simple phrases on a sheet of kraft paper. In the second step, all students began painting the printed drawings of fruits and vegetables, also using other materials such as cardboard and aluminum foil to create free-form figures that they glued onto the kraft paper. In the third step, the same groups continued working on crafting small volumes and miniatures of fruits and vegetables made with papier-mâché. In the fourth step, the students painted the miniatures in various colors on a rectangular plywood table for each group. In the final step, both groups presented their work, including the materials created by the students (**Figures 8** and **9**).



(a) Students' Work 6. **(b)** Students' Work 7.

Figure 3. The same previous work in **Figure 2** of different works chosen by students as part of the creative and free practice, using the educational material of the Samsung Galaxy educational tablet together with the real vegetables during the activity of Module 1 in the art and design workshop.



(a) Students' Work 8. **(b)** Students' Work 9.

Figure 4. A pair of student-created artworks as part of a free physical graphic design exercise, focusing on creating healthy eating informational cards (**a**) and (**b**). During the Module 2 activity, each student group presents two artworks using simple materials: phrases or slogans written in Spanish, along with drawings of colorful fruits and vegetables.



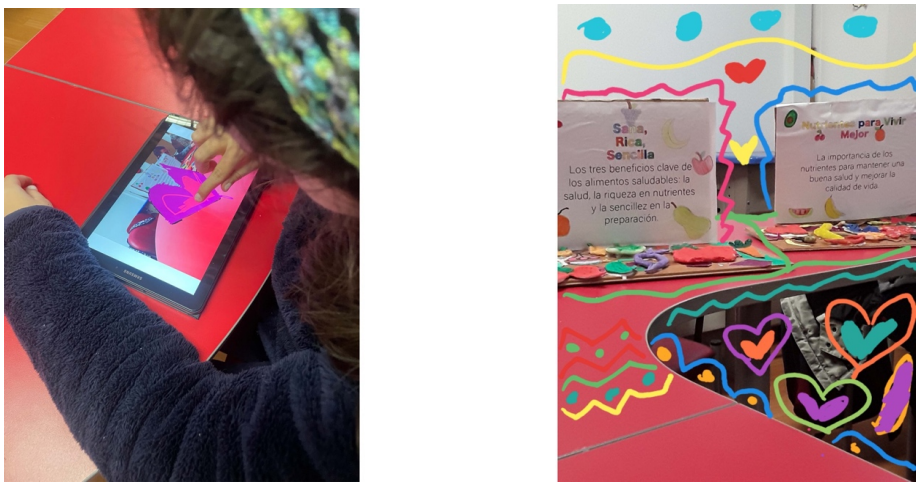
(a) **(b)** **(c)**

Figure 5. A student points her finger to pick a chosen figure (**a**) and some works in progress made of white clay material (paste) in the shape of a grape (**b**) and a painted carrot (**c**) during the Module 3 activity in the art and design workshop.



(a) **(b)** **(c)**

Figure 6. A student is painting one of the chosen phrases (**a**) and the two finished works with different messages written in Spanish, along with the colorful molded figures (**b**) from one work and (**c**) from another, from the Module 3 activity in the art and design workshop.



(a) **(b)**

Figure 7. A student is creating a graphic design with an educational tablet by applying filters to images (**a**) as the final results of Module 3 in the art and design workshop (**b**).



(a) **(b)**

Figure 8. Sample group work of different messages and artistic materials in freestyle miniatures: (**a**) one example and (**b**) another example in the activity carried out in Module 4.



(a) **(b)**

Figure 9. Sample group work of different messages and artistic materials in freestyle miniatures (**a**) and (**b**) in the activity carried out in Module 4.

The penultimate activity involves learning about other materials to increase motivation and develop new practices with visual resources through nutritional education. In some steps, students strengthen their observation skills using the digital whiteboard screen and analyze details to classify dry foods (**Figure 10a**). A volunteer student, with speaking skills in front of the screen, presents four short slogans, and the students vote for the two most popular ones. Then, form two groups to continue the activity. A pair of students cut out four circular cardboard boxes with scissors (despite the difficulty of the physical skill), while the rest of the students observe and select dried fruits and vegetables to experience new and real flavors. All students paint and re-cut out the different texts and shapes of fruits and vegetables, representing these real-life flavors in their creations. The next step is crucial, as the two students continue cutting out various shapes of fruits and vegetables from multi-colored cardboard on the circular cardboard base, avoiding the other group with similar colors. Meanwhile, the rest of the student group selected the foods from the four divisions on the circular recycled cardboard base (**Figure 10b**). The final step of the healthy eating environment sample, using different materials and markers to create various colors through messages, along with the flavors of dried fruits and vegetables (**Figure 10c**).



(a) **(b)** **(c)**

Figure 10. Some photographs, taken at different steps, show the observation of dry foods (**a**), the experimentation with visual materials (**b**), and the creation of group work (**c**) during the activities of Module 5.

The last activity consists of three simple steps. First, each student looks at the texts chosen to exemplify the theme of healthy eating (**Figure 11**). The exercises serve both as a means of generating personal opinions and as a social and communicative exchange of ideas among students. Second, they form two small groups to vote on each of the five most popular quotes before beginning the activity. Each student brings a fruit or vegetable to create up to three short, simple poems inspired by the chosen food (**Figure 12**). Finally, each student selects a printed drawing to color freely with markers, choosing the colors according to their preferences (**Figure 13**).

At the end of the school year, all the completed works—both artistic and digital—are organized for a small exhibition within the school. The display includes a poster with illustrations on healthy living, selected by each student, accompanied by short poems and portraits along with drawings of fruits and vegetables, under the title 'Brief Poems of Healthy Living' (in Spanish). Additionally, a video is presented featuring digital art compositions created by each student. The projects are physically mounted in the exhibition space, and the students enjoy sharing their experiences and freely expressing their opinions.

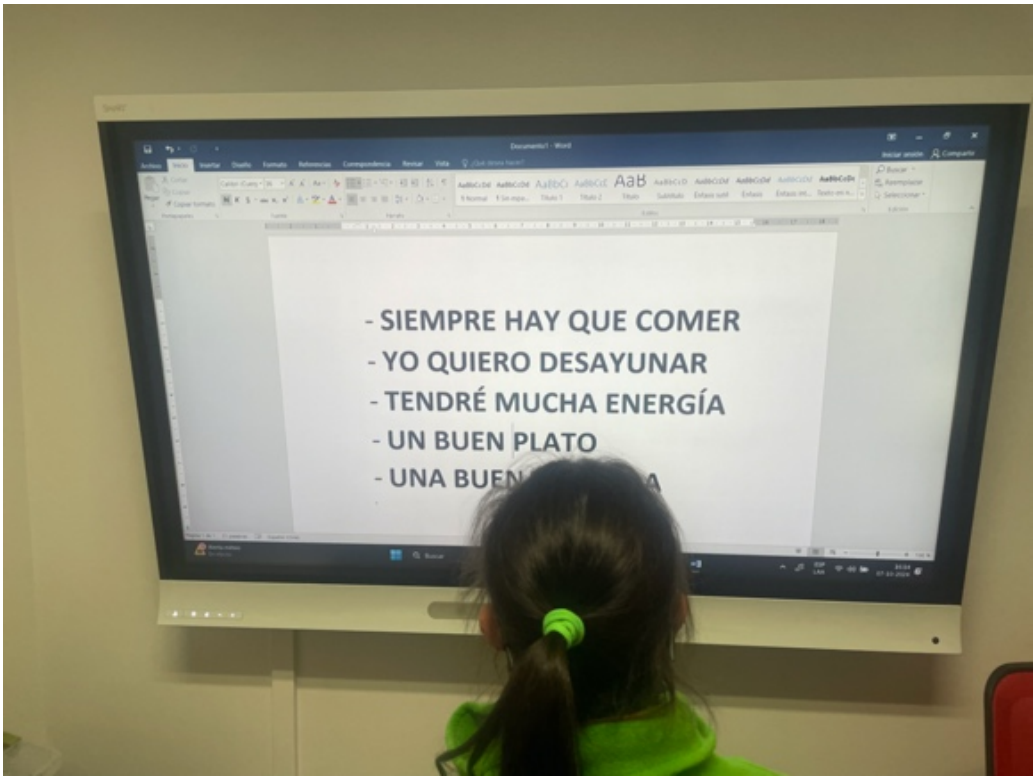
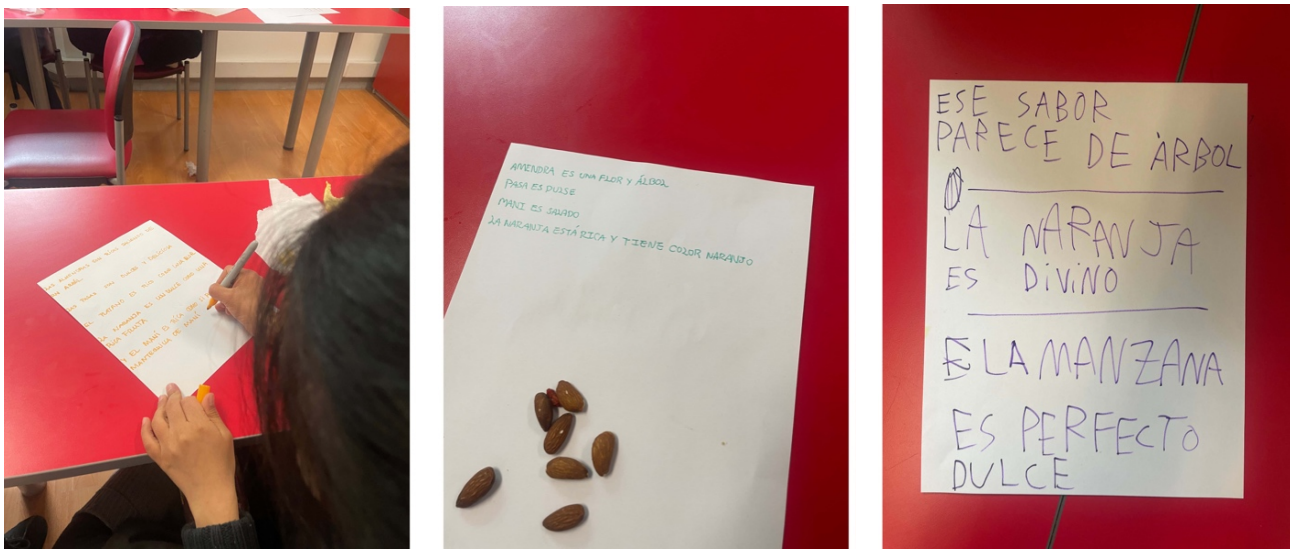


Figure 11. A student with speech or reading difficulties (dyslexia) voluntarily participates in observing five very short and simple sentences projected on the digital whiteboard screen during the Module 6 activity.



(a) **(b)** **(c)**

Figure 12. A sample of the three images of the three simple poems with different words created by the students. One student is writing with several poems (**a**), another with a short sentence along with almond (**b**), and a good example of the writing effort of a student with writing difficulties (dysgraphia) (**c**), along with the fruit poems in different Module 6 activities.



Figure 13. A sample of a series of colorful drawings chosen by each student to present the simplest short poetry collections from the last class of Module 6.

5. Discussion

The new analysis of inclusive interaction between young people with intellectual disabilities and a teacher with hearing impairments in a special education classroom demonstrates the importance of adapted pedagogical strategies that foster social skills, cooperative learning, and cognitive development in all students. Throughout the research, it was observed that the integration of visual, creative, and adaptive technological tools [10–12] promotes an inclusive educational

environment where students can actively participate in their learning process. However, the implementation of these practices is not limited to the use of specific technologies or resources; it also requires a shift in the educational system toward acceptance and equity.

This key to the adapted methodology for proposing food and nutrition education toward innovative pedagogical practice and social integration through artistic and technological activities is essential to ensuring quality, inclusive education for students with intellectual disabilities. It's not only teacher training and their attitude toward inclusion that directly impact active participation and comprehensive development, but also the promotion of an environment of respect and support to create a peaceful setting where students can develop both socially and cognitively. In this sense, the dilemma of inclusive education does not lie in whether inclusion should be for all, but in ensuring that all students, regardless of their differences, have access to quality education that allows them to reach their full potential [21].

Special education educators, particularly those with hearing impairment, not only serve as knowledge transmitters but also facilitate inclusive mediation between students with and without disabilities. Through collaborative activities, these teachers foster the development of social and communication skills, reducing the emotional and social barriers commonly faced by students with intellectual disabilities. However, inclusion depends not only on effective teaching practices but also on the availability of resources, institutional support, and collaboration with other professionals. In this context, teachers must not only be trained to impart knowledge but also to create environments that foster the active participation, integration, and emotional well-being of all students.

By explicitly connecting both theory and practice, the educational contribution is strengthened, especially for students with intellectual disabilities, through the use of technology. This approach, such as digital and multimedia learning theory [22], focuses on the didactic integration of visual, auditory, and textual resources that stimulate different sensory channels. This methodological strategy emphasizes personalized teaching tailored to each student's individual needs, facilitating the understanding of complex concepts and fostering motivation and engagement in learning.

It is crucial to develop cognitive and functional skills through the game-based learning theory [23] to stimulate critical thinking, problem-solving, and decision-making, relying on inclusive interaction with physical materials and technological resources on core nutrition education topics. This approach encourages active participation in adapted hands-on activities that consolidate key knowledge on issues such as healthy eating and well-being, contributing to a more meaningful and accessible educational experience within the special education setting.

On the other hand, the theory of the zone of proximal development (ZPD) [24] reinforces the importance of inclusive mediation in the learning process. By identifying each student's motivation level, teachers can provide the necessary support to help them overcome challenges that lie just beyond their current abilities but within their ZPD potential. This approach is especially valuable in the context of inclusive education, as it allows for the creation of a learning environment where students feel supported but also challenged to progress at their own pace. Adaptability and personalized learning are essential components for promoting the inclusion of students with intellectual disabilities.

The theory of multiple intelligences [25, 26] also contributes to this process, as it recognizes that each student possesses different forms of intelligence that must be addressed in the classroom. By offering a variety of pedagogical approaches that consider the diversity of skills and learning styles, teachers can design activities that are more accessible and relevant to each student. In this context, it is hard to theorize autonomy regarding the development of independence in students with intellectual disabilities. By engaging students in activities that encourage artistic and digital expression, they are given greater control over their own learning and environment. This not only strengthens their decision-making capacity but also increases their self-esteem and confidence in their own skills. Another, lesser-known theory of distributed cognition (on the understanding of supported digital tools) helps students develop a key topic like educational nutrition by reinforcing the teaching and learning of complex content with different visual materials and interactive resources that support creativity. This approach incorporates cognitive autonomy related to health and social well-being, such as social cognitive theory [27].

This analysis suggests that the combination of innovative pedagogical approaches, the use of adaptive methodol-

ogy, and personalized learning are key factors in achieving effective inclusion for students with intellectual disabilities. However, it is necessary to continue exploring the existing barriers to inclusive education and how pedagogical practices can evolve to ensure quality education for all. The interaction between teachers, students, and educational resources must be carefully managed to maximize the benefits of these strategies in the teaching-learning process.

6. Conclusions

This educational proposal, 'Digital Adventures: Magical Nutrition for All,' reinforces the importance of interaction between teacher with hearing impairments and students with intellectual disabilities, recognizing the need to strengthen both educational and employment inclusion for professionals with disabilities across various contexts. This approach seeks to renew teaching and learning processes, fostering active participation and well-being of students, particularly in key areas such as basic nutrition, which are essential for their comprehensive development.

Based on the above, some recommendations for advancing the employment and educational inclusion of teachers with hearing disabilities within the formal education system include:

1. Continuing Professional Development for Teachers: It is crucial that teachers, especially those with hearing impairments, receive ongoing training that addresses pedagogical, technological, and inclusive skills. This will allow for the implementation of new strategies that promote the active participation and meaningful learning of students with intellectual disabilities.
2. Curriculum Adaptation and Flexibility in Teaching: Curricula should be especially flexible to accommodate the individual needs of students. The integration of innovative educational technologies becomes a key tool for personalizing learning and ensuring an inclusive and equitable education for all students.
3. Strengthening Collaboration between Institutions: It is essential to promote collaboration between various educational levels, from schools to universities, and other key stakeholders such as families and interdisciplinary professionals. This will allow for the creation, for example, of an inclusive educational environment that fosters both the academic success and personal development of students with disabilities.
4. Promoting Employment Inclusion: Educational institutions must adopt policies that particularly promote the employment inclusion of teachers with disabilities, ensuring their active participation in the educational field. This integration contributes to greater social and professional cohesion among these educators.
5. Promoting Student Participation: It is essential to create opportunities for students to actively participate in extracurricular activities and collaborative projects. These activities are especially important for developing cognitive, emotional, and social skills that reinforce inclusion and improve the self-esteem of students with intellectual disabilities.

In conclusion, it is essential to renew and strengthen educational support for students with intellectual disabilities, regardless of their skills, through the integration of art, technology, and the promotion of an inclusive society that fosters tolerance and a healthy lifestyle. Furthermore, it is crucial to promote the employment market inclusion of professionals with disabilities, ensuring their active and meaningful participation within the educational environment. The incorporation of innovative and interdisciplinary pedagogical approaches not only strengthens the educational system but also fosters a democratic and inclusive framework, promoting the comprehensive development of students in diverse areas of knowledge.

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Conflicts of Interest

The author declares no conflict of interest.

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