Methodological guidelines for teaching reading and writing to deaf children

Lineamientos metodológicos para la enseñanza de la lecto – escritura en niños sordos

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Abstract

The present work is focused on the theme on disability for what you take into account the boys and girls of the city of Sucre that attend specialized centers and integrators; in such a way that the research covers the area of special education. Considering it is very worrying that ignorance and little information of centers that offer support to people with disabilities, in their rehabilitation and care. Within the document can be found results obtained on the basis of the various instruments applied during the process of the same pipe for its realization; which in turn were of great contribution the joint participation of the children themselves and their parents; on the other side to talk about disability not just talking about the people who believe they have, on the contrary is directed to all the individuals, because in some way or another all possess some disability.

Resumen

El presente trabajo está enfocado en el tema sobre discapacidad por lo que se toma en cuenta a los niños y niñas de la ciudad de Sucre que asisten a centros especializados e integradores; de tal manera que la investigación abarca el área de educación especial. Considerando que es muy preocupante el desconocimiento y la poca información de los centros que brindan apoyo a personas con discapacidad, las en su rehabilitación y atención. Dentro del documento se pueden encontrar resultados obtenidos en base a los diversos instrumentos aplicados durante el proceso del mismo tubo para su realización; que a su vez fueron de gran aporte la participación conjunta de los propios niños y sus padres; por otro lado al hablar de discapacidad no solo se habla de las personas que creen tener, por el contrario va dirigido a todos los individuos, ya que de alguna u otra manera todos poseen alguna discapacidad

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Introduction

In the current context, the inclusion of people with special educational needs is present in education at the level of discourse; however, in these people encounter practice, many difficulties when entering the regular education system. Difficulties are also encountered when specifying or adapting teaching-learning methodologies to teach people who need differentiated educational attention in natural and everyday contexts.

In this sense, the purpose of this research is to determine the educational characteristics of deaf children and some methodological guidelines that respond to their needs and facilitate the development and improve the teaching and learning of reading and writing, for a better insertion in regular education.

Materials and methods

Conducting research in the area of special education in our context is quite complex, because there is still a certain reserve with respect to special children, both on the part of parents, children themselves and teachers. In the present investigation these difficulties were encountered, in addition to the fact that the researchers needed more time to learn basic sign language in order to be able to communicate with both the children and the deaf teachers. However, we were able to count on the collaboration of an interpreter, who was able to collaborate only with the application of the tests, on the understanding that she decided to support us free of charge and disinterestedly. For this reason it was not possible to interview the deaf children.

The Interview

The interview method was applied to regular education teachers, in order to determine the predisposition and the level of information that teachers have about deaf people and about the teaching-learning process of language in regular school children. An interview was also conducted with the community of Chuquisaca, in order to analyze their perception of the problems and the educational situation of deaf children.

Documentary review

This technique was used to conduct an analysis of the documentation of the Education Reform Law, the Political Constitution of the State.

The survey

It was administered to deaf teachers who work teaching deaf children to be integrated into regular education. Unfortunately, none of the surveys given to the teachers could be retrieved.

Population and sample

Due to the characteristics of the research and the particularities of the population with which we worked and the difficulty of access to it, the research was more interested in deepening the information and the qualitative analysis of the same, therefore the population and sample presented do not respond to statistical criteria.

Thus we have the information of 25 people interviewed corresponding to the population of Sucre, taken at random on the public street, with a large number of people who refused to be interviewed. On the other hand, 11 regular school teachers were interviewed; in the other cases, there was no access or acceptance for the interviews. We do not have information corresponding to deaf teachers who teach deaf children, because the surveys were not returned. Finally, we were able to work with three deaf children, whose parents could not be interviewed. It is unfortunate that there is little access to and vision of the research process, both by society in general and by professionals in the educational field.

Analysis of the interview with regular school teachers

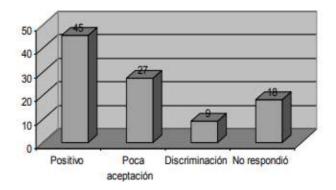


Figure 1 Level of acceptance of deaf children in our country

45% of the teachers interviewed were of the opinion that in the country, deaf children do not have a high level of acceptance, since 55% of those interviewed were of the opinion that deaf children are not very well accepted, since most people do not know sign language or are not interested in learning to interact with deaf children, on the other hand, discrimination is a factor that prevents the acceptance of these children just because they have a hearing impairment.

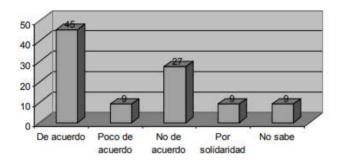


Figure 2 Level of acceptance of deaf children in the classroom

45% of the teachers interviewed agree that these children should enter a regular school because they have the same rights as any other child, on the other hand 55% of those interviewed do not accept the inclusion of these children in regular schools arguing that these children need special education or training.

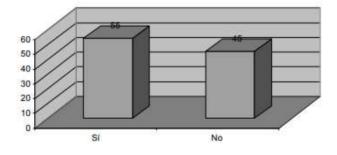


Figure 3 Presence of a special child in a regular classroom

55% of those interviewed have been in charge of special children, trying to integrate them into the group and providing them with learning support by making curricular adaptations group and providing them with support in their learning by making curricular adaptations.

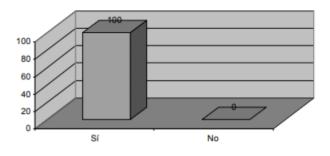


Figure 4 Willingness to learn sign language

100% of the teachers interviewed agree with learning sign language, because in this way they will be able to interact with these children and provide them with pedagogical support.

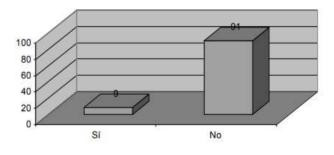


Figure 5 Training on the inclusion of special children into regular education

91% of those interviewed have not received any training on the inclusion of special children in regular education, which implies that there are no educational policies that favor the education of these children. On the other hand, only 9% have received training from nongovernmental organizations and not from governmental agencies.

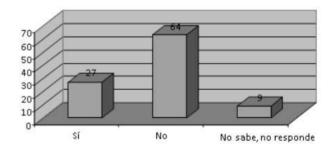


Figure 6 Training on curricular adaptations

74 % of the teachers did not receive training on curricular adaptations, which shows that teachers are not prepared to attend to these children, and that there is no help from the national government to promote this type of projects.

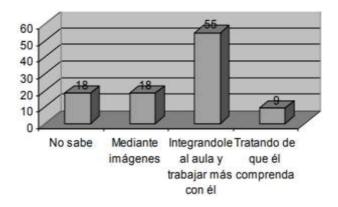


Figure 7 Working with deaf children

55% of the interviewees responded that they can spend most of their time working with these children and using material resources such as: images, improvised mimicry, etc.

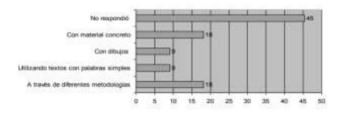


Figure 8 Teaching children to read and write

Forty-five percent of the interviewees did not answer about how they teach in the classroom, this shows that there is a certain degree of disinterest in the learning process of the child, however 55% know how to teach the child, through: drawings, concrete material, with words related to their context. This shows that they know different methodologies.

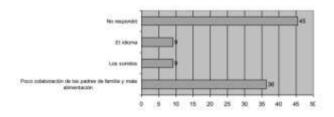


Figure 9 Difficulties in reading and writing in children

45% of the interviewees did not answer about the reading and writing difficulties of the children, this shows that there is a certain degree of disinterest in the learning process of the child, on the other hand, there is also a lack of interest on the part of the parents, which is a difficulty that affects the performance of the children.

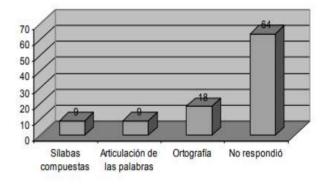


Figure 10 Grammatical aspects that are costly for children to learn

In the interviews conducted, 64% did not answer about which grammatical aspects are difficult for children to learn, however 18% of the teachers say that the most difficult grammatical aspects are: spelling, articulation of words and syllables, and the use of the word "syllables" and "syllables".

Analysis of the interview with the Sucre population

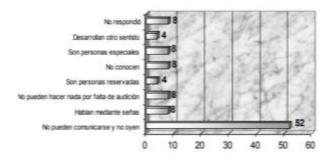


Figure 11 Knowledge of the population in relation to deaf people

More than 52% of the interviewed population answered that people with hearing impairment cannot communicate, because it is understood that deafness prevents them from doing so, that is to say, that our society is not well informed about the subject.

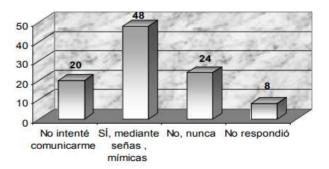


Figure 12 Attempts to communicate with deaf persons

48% of the citizens tried to communicate with a deaf person, not exactly with sign language, but on the contrary with improvised mimics, which is also a form of communication. Of the people interviewed showed interest in communicating.

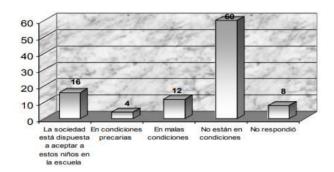


Figure 13 Conditions in which Sucre society finds itself to include deaf children in regular schools regular

60% of the people interviewed believe that the regular school is not in a position to include these children, which means that society's perception of the school is correc This means that society's perception of the school is correct, since the teachers themselves consider that they are not prepared, nor do they have the time to do so.

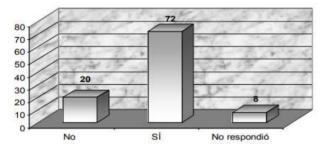


Figure 14 Attempts to learn sign language

The population showed some interest in learning sign language, of the 100% interviewed, 72% have tried to learn sign language but to no avail of the 100% interviewed, 72% have tried to learn sign language but to no avail.

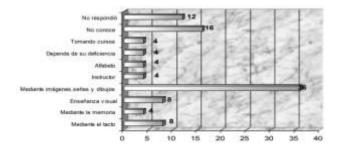


Figure 15 How the deaf person learns to read and write

Of the 36% of the people interviewed, the deaf person's way of learning to read and write is through images, signs and drawings, which implies that the general population has a basic knowledge about the deaf child's learning.

Case study

The case study was conducted with three deaf children, to whom a psycho-technical test (the ABC) was applied in order to determine the development of skills necessary for learning to read and write, generally used to promote preschool children to primary education, in addition to highlighting specific abilities that each test measures, such as visual-motor coordination. immediate memory, motor memory, auditory memory, auditory memory, logical memory, pronunciation, motor coordination, minimum attention span and fatigue. Therefore, the child's behavior during the execution of the test is also observed.

In this case, adaptations were made to the test, due to the characteristics of the children with whom we worked, which are as follows: In the auditory memory subtest 4, instead of verbally telling the child the seven words and then repeating them, the child was told in sign language the seven words in one and then the child had to repeat them trying to remember all the words, also in sign language.

In the sub test 6 of pronunciation, instead of the child pronouncing the words that the examiner ordered him, he was shown some cards with a drawing of the object and the written word of the same object, he had to recognize and read the card, and then say the object in sign language, in this case what was evaluated was the amount of vocabulary they have in their mother tongue, which is sign language. Because it is an essential element for fluent communication in the deaf person.

There was also an activity of expression through painting, which had the purpose of characterizing social aspects, companionship, impulse control and affectivity.

Analysis of case studies

The following are the case studies of the three deaf children with whom we worked, analyzing the test applied (the ABC) and the activity of expression through painting.

Evaluation and analysis of the ABC test: Name: L. A.

Years:8 years.

Test: Nº 1 Coordinación v Isomotora

Three points (superior), since Limbert has correctly reproduced the three figures, with right angles and visibly recognizable. Limbert used the right hand.

Observation

Limbert showed little availability to the performance of the required task, specifically he showed tiredness and resistance and in the third item of test number one. The child executed the three items of this test due to the insistence of the interpreter.

Valuation

The child has a good fine motor skills, since he manipulates the pencil easily and safely, making good tracings. The time limit for the execution of the test is one minute for each item (figure), to which Limbert responded very quickly mainly in the first two items (nine seconds for the first figure), (eight seconds for the second figure) and (twenty seconds for the third figure). This means that the vasomotor coordination is quite developed, therefore Limbert has the ability to reproduce with quality and agility what was visually perceived.

Test Nº 2 Immediate memory

Scoring two points (medium), given that Limbert has correctly remembered four figures out of the seven figures shown on the sheet for thirty seconds.

Observation

Limbert, while performing the test, showed a great deal of body mobility and restlessness, expressively demonstrating that he is aware of his forgetfulness while trying to remember. In the face of the failure of the task he bows his head.

Valuation

Probably the score obtained is due to their resistance to perform the task and their lack of concentration and attention to the given task, which means that in terms of visual memory there are no noticeable weaknesses; however, there are weaknesses in their level of concentration and attention.

Another aspect to be analyzed is frustration tolerance; at this time it cannot be stated with certainty that he has a low frustration tolerance; however, there are certain indicators that show that he does not tolerate the failure of a task.

Test Nº 3 Motor memory

The grade is two points (medium), given that Limbert made a good reproduction of two figures, investing only one.

Observation

He reproduced the two figures obeying the direction of the movement made and the third one in inverted direction. Another aspect is that the child showed resistance and restlessness.

Valuation

Again he demonstrates a good ability and that the three figures are recognizable; however, the direction in the movement of the tracing in one of them is the one that fails: this may be due to the fact that he is not persistent in the execution of a task and continually wants to give up. The execution time limit for each figure is one minute and Limbert executed it in a reduced time: (the first figure was done in twelve seconds) (the second figure in three seconds) and the (third figure in five seconds) so the child demonstrates to have adequate motor memory, meanwhile he managed to identify and remember the figures made in space by the examiner, however a visual representation of each figure was not possible.

Test Nº 4 Memory

Rating is two points (average) since Limbert managed to remember five words out of the seven words that were communicated to him.

Observation

Limbert, when performing the task, was restless and showed some resistance, and the translator insisted that he perform the activity.

Valuation

Limbert has a good capacity to retain information that is not visually represented, which implies that the development of this capacity in the learning process will allow the child to understand abstract concepts or texts.

Test Nº 5 Logical memory

Textual narration of the story: -Maria bought doll, fell, cried, bought Score is zero points; because she cannot reproduce and identify the three main actions of the story (bought, broke and cried) and the three main details (glass, blue eyes and yellow dress) were omitted).

Remarks

It can be observed that the child continued to show resistance and restlessness during the performance of the task; however, he was able to execute the task.

Valuation:

Limbert presents difficulty in narrating the story. The important thing in this case is to analyze the order in which he showed the events that happened, which must respond to a coherent logic. In Limbert's story there is logic in the events that happened, however, he omitted the details of the story. This means that he was able to understand the logic of the story: however, he did not remember the additional aspects of the story, therefore two things can be presumed: a weakness in the vocabulary or difficulties in memory.

Test Nº 6 Signed Vocabulary

The grade obtained is one point, because out of eleven vocabulary words he answered only four words (Indian, helicopter, squirrel, lamp, mirror, horse, hook, worm, world, boot, candle, etc.), and only four words out of eleven (Indian, helicopter, squirrel, lamp, mirror, horse, hook, worm, world, boot, sail, etc.).

Observation

Again, it can be seen that the child showed resistance and restlessness because he wanted to leave quickly; however, he performed the exercise.

Valuation

Limbert presents weakness in vocabulary, because when he was asked to identify the drawings he had difficulty in interpreting through signs, however he made an effort to try to answer the name of the figures, it can be said that he presents weakness in his vocabulary.

Test Nº 7 Motor coordination

The grade obtained is two points (average) since Limbert cut more than half of the line respecting the stroke, although in one of the strokes he started on the other side and not on the side indicated.

Observation

Limbert was nervous and insecure as he was initially reluctant to do the task and due to the translator's insistence he started to cut off. The time limit for the task was one minute, but Limbert stopped cutting and did it in thirty-nine seconds and no longer wanted to do the exercise.

Valuation

Here we can see that Limbert has a good motor coordination because he cut the line almost halfway and respecting the line, here we must also take into account that the child left the task early because he did not continue cutting, this could be due to his resistance, therefore, the motor coordination should be further developed for his teaching and learning process.

Test: Nº 8 Minimal attention fatigue

The grade obtained is two points (average) given that Limbert made twenty-nine points in each table.

Observation

The child wanted to withdraw from the activity, however, he did so due to the teacher's insistence.

Valuation

Limbert did not show signs of fatigue or tiredness before the task, therefore he performed the task relatively quickly, although the child changed direction from right to left when he should have done it from left to right.

Analysis of the activity of expression with paint Social behavior

Description

He tells the others how to put their names, and he constantly complains if they don't listen to him and if they don't do the houses correctly. Limbert is the one who gives the order to start the activity, observes them and corrects the others. He is reluctant to lend out his materials; he borrows from others and the others pay attention to him.

The child is the one who did the drawing, he was the only one who knew what he wanted to paint and what he did, the others did. He expresses visibly noticeable discomfort or dissatisfaction for the things he considers wrong.

Analysis

It can be said that Limbert is the identified leader, since he is the one who is listened to by others, being that others are dependent, it is easy for him to be a leader. He is a confident and dedicated person who cares for others.

Impulse control and ability to obey orders

Limbert controls his impulses and obeys the teacher's orders.

Affectivity

Feels the foolishness of helping his colleagues by proposing solutions.

Test evaluation and analysis ABC Name: J. P. Years: 8 years.

Test Nº 1 Coordination v Isomotor

Javier's score is three points (superior), since the child has reproduced more accurately the first two figures, although the third one is not accurate but recognizable. Javier used his right hand.

Observation

The child was predisposed to collaborate with the requested task, an external factor was that unexpected and difficult to avoid distracting elements were presented.

Valuation

It is important to value that Javier has good fine psychomotor skills, since he handles the pencil well and draws with confidence.

On the other hand, it should be noted that the time limit for each trace was one minute for each trace, so Javier made the trace no more than twenty seconds in each test (first figure twenty seconds), (second figure fourteen seconds) and (third figure twenty seconds), which means that the child has the ability to reproduce with agility and precision what he perceives visually.

Test Nº 2 Immediate memory

The grade obtained is two points (medium), given that Javier was able to remember six of the seven figures shown during thirty seconds without observing the poster.

Observation

Javier was predisposed and enthusiastic about the execution of the task.

Valuation

The visual memory capacity is good, which corroborates that what is perceived visually is the best remembered, therefore the sense of sight should be exploited more in the teaching-learning process.

Test Nº 3 Motor memory

The score obtained by Javier is three points (superior), so he correctly reproduced the three figures.

Observation

The child had enough interruption; in spite of which the child was able to correctly make the three designated figures and obey the direction of movement performed in each figure.

Valuation

Javier demonstrated a good logic in the figures; given that he obeyed the direction of the movement performed. Again, it is observed that Javier has a good motor memory, because he was able to remember the movement made in space by the examiner without having a visual representation.

The time given for each figure is one minute, in the first figure he did it in ten seconds, the second in five seconds and the third in seven seconds, which means that Javier has a good motor memory and that undoubtedly helps him in the reading and writing processes.

Test Nº 4 Auditory memory

Rating two points (medium). The child was able to remember five words out of the seven words that I communicated to him/her.

Observation

Javier's response was obtained after several insistences from the translator so that he could reproduce the words given by the translator, it was observed the repetition of two of the words and the confusion of one object with another given the similarity between them.

The child was able to reproduce the words given by the translator, which means that he has a good retention of information that is not visually represented, although he confused an object that bore some resemblance to the translator's words.

Test Nº 5 Logical memory

Textual narration of the story: Maria buys, cries, has blue eyes and a yellow dress and it broke and was made of glass. The three-point score meanwhile reproduced the three most important actions of the story (she bought, she broke, she cried) and the three important details (glass, blue eyes, yellow dress, and she broke) as well as the three most important details (glass, blue eyes, yellow dress).

Observation

He has been attentive during the narration of the story since the instructor has made an effort for the child to understand the logic of the story, which also implies that in sign language there are no connectors and this did not favor an adequate comprehension.

Test Nº 6 Signed Vocabulary

Rating is three points (superior), he has been able to identify ten of the eleven figures shown on the cards and to express them in sign language.

Observation

There was the insistence of the translator to maintain his attention in spite of the frequent interruptions, in spite of that he was able to perform the task with predisposition. He persisted in wanting to communicate what he observed in the slide, despite not having the vocabulary for the last word, he did his best to show the observed object that did not correspond to sign language; however, they were understandable for any person, which was not qualified as correct because it shows that he does not have the vocabulary for that word.

Assessment

The cards were chosen by the teachers themselves, according to the context of their learning. Javier showed to have a vocabulary but he did not know some words, in spite of that he made an effort to show the object.

Test Nº 7 Motor coordination

Rating two points (medium). The child cut very well until almost half of one of the designs, demonstrating that he has a good psychomotor skills respecting the given design, on the other hand in the second design he did it with enough precision but only until the fourth part of the design.

Observation

Javier was able to accurately cut the given designs which implied a predisposition to cut the given task. The child has good vasomotor coordination and good handling of the scissors. The fact that Javier has good psychomotor skills is important to enhance this skill in his learning process. Javier is skilled at cutting curves and right angles.

Test N ° 8 Minimal attention fatigue

Rating is one point (low). I achieve the score of one point for the fact that I managed to make seventeen of the seventeen points in thirty seconds.

Observation

Javier showed predisposition and tranquility in the execution of the test.

Valuation

The child did not show signs of fatigue or tiredness before the task: however, he did not do the task quickly, but he did it accurately.

Analysis of the activity of expression with paint

Social behavior Description

Javier requires another classmate to initiate the activity, he does what his classmate tells him to do. During the activity, he showed that he was not detached from the materials he was using, since he did not want to share his materials. He was observed helping his partner, behaving calmly, kindly and showing pleasure in the activity. The drawing is a copy of his partner's design and colors.

Analysis

Javier demonstrates to be dependent, possibly expects in many aspects to be told what he should do, this is an aspect that is not beneficial for him, because it is always aspired that a person is independent to be able to develop freely and develop in society.

He does not show aggressive behavior, neither against himself nor with the checkers, which favors him to interact with the checkers. The writing of his name is done with pencil, the name presents a confusion between upper and lower case letters. He has a good spatial location, only he could not realize the purpose of the card and put the full name.

Impulse control and ability to obey orders

Javier shows he is not impulsive and obeys orders without complaints

Affectivity

He is an affectionate child, he helped his partner, he was just not detached from his materials.

ABC Test Analysis

Name: R. R. Years: 7 years.

Test Nº 1 Isomotor Coordination

The score obtained by Reyna was 3 points (superior) where the first two figures are almost exact and the last one is not exact but it is recognizable, she executed the test with the right hand.

Observation

Reyna during this test was predisposed and enthusiastic at the moment of executing the test. Showing much joy and satisfaction with the achievement of the task.

Valuation

Reyna demonstrated a good handling of the pencil, i.e. she has good fine psychomotor skills; however, she shows some insecurity in the most unfamiliar and difficult tracing for her.

One aspect to highlight is that Reyna executed this test in a reduced time (first figure in 11sec. second figure in 10sec. third figure in 12sec.), being that the time limit for the execution of the test is 1min. for each figure. This means that she has a good command of vasomotor coordination and can reproduce what she visually perceives.

Test Nº 2 Visual memory

The score obtained by Reyna was zero (null), she was unable to remember any of the 7 figures shown on the sheet for 30 seconds, and she was unable to remember any of the 7 figures shown on the sheet for 30 seconds, and she was unable to remember any of the 7 figures shown on the sheet for 30 seconds.

Observation

At the beginning of the test she was enthusiastic about the assigned task, before the visual exposure of the laminate she demonstrated to have the vocabulary for each of the figures, but she failed to remember any of the objects, she tried to respond by spelling but without success. In the face of the failure to perform the test she tries to avoid the continuation of the test.

Valuation

According to the results of the test, Reyna would have difficulty with visual memory. Ruling out the possibility that she was unaware of the figures shown on the poster, since she was able to name each figure when shown the poster. Memory is an essential element for any student, especially for deaf students. In this case, visual memory must be reinforced since the sense of sight is the sense that must be used par excellence in these students.

Test Nº 3 Motor memory

The grade obtained by Reyna was 1 point (lower) where only one was correctly done and the other two figures were done in a different way and not according to the figures that were represented to her.

Observation

During the test she was predisposed to perform the figures, but she was also distracted from the second test onwards. The figure was first made in the air by the examiner and then Reyna represented it in the same way in the final representation she represented it in a different way, that is to say that she did it well at the moment she was told to do it, but later she could not do it the same way.

Valuation

Reyna has a good handling of the pencil but according to the results obtained she would have difficulty in motor memory because she could not retain the information for a long time. One aspect to highlight is that Reyna executed this test in a reduced time (the first figure 15sec., second 10sec., third 15sec.) being the time limit 1min.

Test Nº4 Memory

The score obtained by Reyna was 1 point (lower), because she managed to remember only two words out of the 7 words that were communicated to her.

Observation

Reyna during this test performed the actions indicated by the translator but after determining to mention the words, the translator asked her to repeat the words, she only mentioned three (table, chair, stone), she mentioned again (stone, stone, dog) but dog was not in the list of words and then she did not mention any more words.

Valuation

According to the results of the test Reyna would have difficulty in memory because the information she received could not be easily retained. Memory is an indispensable element for any activity because it allows us to remember events.

Test Nº5 Logical memory

The score obtained by Reyna was 0 points (null) because she only mentioned one action (she cried), the other actions (she bought, she left) and details (she glassed, blue eyes, yellow) were omitted. Reyna, during this test, was attentive to what was happening in the story, sometimes imitating the actions of the translator, but at the end of the story the translator told her to tell the story herself, at first she did not want to and then she said: yellow, she fell, she cried a lot, her dress broke, the doll broke; she did not want to say any more.

Valuation

Reyna tried to remember but she said it in incoherent form this means that she would have difficulty in logical memory because the events were remembered in an incoherent form.

Test Nº6 Vocabulary in sign language

The score obtained by Reyna was 3 points (superior) because of the 11 figures shown in the cards, nine were recognized and expressed through signs and the other two were not recognized.

Observation

During the test she was willing and enthusiastic but I cannot identify all the figures but I try to remember her.

Valuation

The cards were chosen by the teacher. Reyna quickly expresses through signs the words she knows and recognizes on the cards, which means that her vocabulary is being adapted to her sign language.

Test Nº 7 Motor coordination

Reyna's score was 3 points (superior) because the cut it made in the two figures was more than half of that of the other two.

Observation

Reyna showed predisposition and joy when performing the test even though the curved figure was shorter than the straight figure.

Valuation

She performed the test adequately, which means that she has good motor coordination; confirming the first test she also has visual coordination. She is apt for writing.

Test Nº 8 Minimal attention and fatigue

The grade obtained by Reyna was 1 point (lower) because she made 2 points in 2 out of 100 squares.

The girl did the test with enthusiasm, but when the time was up, she insisted on finishing the test. After a while she abandoned the task because she no longer wanted to do it.

Valuation

The test was performed according to the instructions (from left to right), with the right hand, and after one minute he lifted a little more, but then he got tired and abandoned the work. The time of concentration is very important because the work the child will do depends on it and it is also one of the requirements for school.

Social behavior

Description

Shows tranquility with his peers but at the same time does not share his materials with his classmates. Not very sociable, tends to imitate actions of others, shows personal dependence.

Analysis

He is a dependent person who imitates what others do, on the other hand, he is insistent when performing any activity.

Impulse control and ability to obey orders

Reyna is not impulsive but obeys orders from her teacher and classmates

Affectivity

Does not show affectivity is rather quiet, but demonstrates companionship and a certain degree of kindness to her peers.

Results and discussion

Methodological guidelines for the development of reading and writing skills

It is suggested that the teacher develop his professional practice supported by Action Research, since he is the right person to do research in his classroom, since he is the one who experiences the problems on a daily basis and therefore can become a professional who is constantly learning from his experience. This research will allow to face the problems of reading and writing in deaf children, as long as the teacher is also willing to contribute to an active participation that seeks the improvement of their programs and activities that they carry out in the educational field, specifically in reading and writing in deaf children. Work as a team (at least two teachers) and have a minimum time to meet. Constantly reflect and selfevaluate the educational practice, especially the problems and strategies to be implemented to solve them.

Finally, assume some autonomy to innovate in their practices of teaching reading and writing to deaf children.

The achievement of learning in children is directly related to educational practices and the greatest skills that can be developed in children are those of written communication. Another important aspect is to reflect and suggest strategies that are playful, creative, pleasurable and real.

Communication skills to be developed

Unification of the communication modality: The teachers must unify, among themselves, the way of communicating with the students, which serves as a model to motivate the children's communication with other teachers and among themselves. For this, the teachers implement sign language as the main method of communication.

Incorporation of the use of the alphabet -Used as a tool to support oral expression and comprehension in the communicative process. In addition, it is used to refer to all those words that do not have a specific sign.

Use of artistic and corporal expression as a form of communication, which at the same time helps in the comprehension of written texts. For example, drawing or painting what they understand about a text or a personal experience, motivating them to relate it to the rest of the class, encouraging a group discussion around the topic presented. Acting out a text or their experience.

Strategies to motivate deaf children to speak in front of the class, such as group storytelling among the children, and presentations on the contents worked on in class.

Strategies to improve reading and writing skills in deaf children

Pre-reading activities: The topic is presented and the children should ask questions about the topic; after reading the topic the children are invited to relate any experiences they have feared in relation to the topic and then seek answers to the questions that have been asked. This would allow the children to think about and relate the topic they are studying to their context. The reading corner - Teachers will create a reading corner where they have different books with different themes where children can read and manipulate the text in such a way that it is meaningful to them.

Use of real texts: Teachers should choose topics that interest the children related to their context, they should have their own text and in this way allow their manipulation, their progress should be according to their age; the resources that can be used are: magazines, comics, stories, stories. This will show the child's interest in the activities he/she performs.

Strategies to improve writing

Communication notebooks: These are notebooks that each child should have, in which he/she will write what he/she wants to communicate, which are not corrected, but the teacher will point out his/her mistake by writing on the blackboard.

This strategy will allow the children to create their own stories, comics and this will help in the development of their imagination for this, you must have material available. Writing verbs and vocabulary in the children's notebook will help them remember and practice reading and writing. Emphasize the understanding of the meanings of the words being worked on, based on partner dramas, dramatizations, etc.

Use of the computer: It is a highly motivating tool for children to write texts according to their needs or in relation to their activities. Building cooperative classes, then, is about building cooperative classes where deaf children work in a meaningful place and can engage in their own learning, rather than endure a lecture.

Logogenics as a method of teaching and learning to read and write

It is a method based on Noam Chomsky's -Generative Transformational Grammar^{||} theory of grammar. It has an innatist position regarding language, it assumes that language is a humanistic faculty with which we are born and gives us the possibility of acquiring any language in which we are immersed. According to this theory, we all have the ability to read and write from birth, so deaf children are not prevented from learning to read and write. It is recommended that the teacher stands in front of the child. The child's attention must be captured and this is achieved without forcing him/her; it must be the look, the body mimicry, the facial gestures that lead the child to look for the face during the communication.

This method consists of three steps:

In the first step: The speech therapist is the one who accompanies the learning process of deaf children and youth: he/she issues written commands followed by the action. Then he/she writes while the child follows the reading of the sentence: "Put the ball under the table" and accompanies the writing of the sentence by taking a ball and putting it under the table.

In this way, the deaf child will understand that the written sentence corresponds to the action of putting a ball under the table. At first, they are simple commands that are presented in minimal pairs, i.e., the same command with a small variation. For example: "put the ball under the table", "put the balls under the table" (i.e., he will be able to recognize the quantity of the objects either plural or singular).

After five or six months have elapsed, the:

Second step: It has to do with questions. The logogenist asks the child or youngster simple questions such as: "Where is the ball? As he/she has already understood the notions of space and knows how to locate objects -up, down, over-, he/she will be able to answer and will say -the ball is under the table. (the child reads and relates).

Third step: The child is already constructing sentences and can communicate through written dialogue in a fluent manner. At this stage, stories and texts are read. (Nueva Gaitana, Isabel II, Jorge Eliécer Gaitán,

Manuela Beltrán e Instituto Ral Privada.)

The application of this method will help the deaf child to better understand the process of reading and writing and will be able to relate the words to the action being performed.

Other aspects that should be taken into account for the education of a deaf person are the following notions:

- Spatial notions (inside, where, outside, under, above, under, over,...)
- Temporary notions (when, after, soon, fast, slow, slowly...)
- Causal notions (because, in order to...)
- Also Categories (sizes, colors, shapes...)
- Specific questions (what it does, who, how many...)
- This will allow to carry out with an oral communication:
- Storytelling and logical sequences of action.
- Plan the game, or the activities to be done.
- Comment and remember what was done the day before.
- Explain what is going on, why it is necessary to make some

Conclusions

Sucre society is not yet in a position to include special persons, since it was determined that people have little information about them and their level of acceptance is very low.

Regarding society's opinion on the inclusion of special children, in this case deaf people, in regular schools, it is considered that the school as an institution is not yet in the necessary conditions to attend, educate and welcome these people.

Regular school teachers are not yet prepared and do not have the necessary conditions to include people with special educational needs in their classrooms; however, they claim to have a high degree of predisposition to be trained in sign language.

Teachers demand extra financial attention and time to be able to think about serving deaf children in their classrooms, otherwise they consider it unlikely to have special children in their classrooms. Both the society of Sucre and the teachers consider that special children should receive specialized attention, this implies that these people are not being considered as -normall; but rather that they are -special and that they cannot have, nor integrate to the -normal lifel, nor to the regular education as any other person.

The deaf children with whom the research was conducted demonstrate well-developed visual-motor coordination and fine motor skills.

The skills that need to be addressed and developed in greater depth are memory, logical memory, vocabulary enrichment in their mother tongue (sign language) and improving their ability to concentrate and attention span.

Deaf children are sociable, affectionate, and demand attention and affection; however, they need to have more clearly established limits and socially accepted norms.

In theoretical terms it can be said that the learning process of deaf children is generated mainly through the sense of sight, therefore they learn more when they are stimulated visually, with corporal and artistic expression.

To improve their communication processes, emphasis should be placed on learning a good amount of vocabulary in their mother tongue and on the other hand, exercising spelling, typography and training the ability to express the meaning of things. deaf children have the potential to learn reading and writing just like a normal child and of course it would be much easier for them to have the social and educational conditions at a good level.

Finally, it can be stated with certainty that educational institutions and their agents still do not have a research culture, i.e., they do not conduct research and on the other hand, they do not open the door to research by other agents.

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References

Lara F., Los niños sordos y el aprendizaje escolar. Disponible en: www.inlatina.org/educacion- inclusiva/docmateriales/fortina-los-ninos-sordos-y-elaprendizaje-escolar.doc

Gladis Mabel Guanca, Análisis de Anteproyecto de la Educación. Disponible en: debateeducacion.educ.ar/ley/Gladys%20Mabel %20Guanca.doc

Irene Cabrera. Erwin Frei. María Rosa Lissi, Estrategias para mejorar la enseñanza de la lectura y escritura en el trabajo con los niños sordos. Disponible en: www.fonadis.cl/tools/resources.php?id=466

Niños sordos que leen y escriben. Disponible en:

http://www.colombiaaprende.edu.co/html/home /1592/article-90427.html

Características de los niños sordos. Disponible en:

http://usuarios.discapnet.es/ojo_oido/el_ni%C3 %B1o_sordo.htm

Disponible en:

http://www.psicologoescolar.com/CUIDADOR /14_caracteristicas_basicas_del_nino_sordo.ht m. Disponible en: www.fonadis.cl/tools/resources.php?id=466