

Disability, Diversity and Inclusive Education in Haiti

Learning, Exclusion and Educational Relationships in the Context of Crises

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Chapter 8

Learning of written language

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8 Learning of written language

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Rochambeau Lainy and Ralphson Pierre

8.1 Introduction

Deafness is the main topic here. But, since cases of deaf people with symptoms similar to autism have been identified in our field of investigation, some clarifications may be necessary. Establishing that congenital deafness is a normal phenomenon, and that deaf people can encounter difficulties like any other individual, autism will thus be studied as a disorder that manifests itself in some of these sampled students. We also must clarify the terms: deaf/cophotic, hard-of-hearing, hearing impaired, and deaf-mute. To avoid confusion and to be careful of the usage of these terms, some of which may be used pejoratively, some cautions on the phenomenon of deafness are necessary. These cautions are the main thread of this study and will help us define the distinction of a part of our survey population, namely, the students presenting total loss of hearing (deaf/cophotic) and those having hearing impairment (hard-of-hearing).

As Benvenuto (2004) suggests with some subtlety, the Deaf are a human group forming a minority cultural and linguistic community that the dominant tendency unfortunately considers to be deficient. They do not hear, and have had, since birth or acquired later, what medical parlance calls *anacusis* or *cophosis*. The hard-of-hearing, on the other hand, are a group whose hearing ability is severely and profoundly impaired as a result of factors arising from some circumstances (ear dysfunction, trauma, age, etc.). This term is often used in an effort to be more politically correct – in other words, to tone down a harsh reality that we don't want to mention, even if the fact is before us. The expression “hearing impaired” is used in this way, instead of “deaf” or “hard-of-hearing,” but its use is often disputed because it suggests that the deaf are deficient (Dalle-Nazébi & Lachance, 2009). The term “deaf-mute” is, on the other hand, a way of linking deafness and muteness, even if, in reality it is extremely rare for a person to suffer from both these disorders at the same time. “Those who use sign language are not mute. It is just that their language is different from ours,” Marie Heylbroeck reminds us.²

8.2 Deafness in the literature: some benchmarks

Deafness is medically and socially perceived as difficulties. The speech therapy dictionary defines it as “hearing impairment, whatever its origin” (Brin-Henry et al., 2011). It is explained by the partial or complete loss of the sensory faculty which prevents a person from receiving and producing the verbal language as the hearing do. More specific definitions include: (1) a decrease in the ability to perceive sounds; (2) impairment or abolition of the sense of hearing, or impairment of the perception of sound; (3) a condition where the person hears less well than a person with normal hearing. We can define several levels of deafness: slight if the hearing loss is between 21 and 40 dB (loss of soft or shrill sounds); medium if this loss is between 41 and 70 dB (hearing aid essential); severe for a loss between 70 and 90 dB (lip reading or rehabilitation necessary); deep for a loss greater than 90 dB, and total (or cophosis) for a hearing loss greater than 120 dB (lack of hearing).

While people of this community are traditionally referred to as being both deaf and dumb, hence the term “deaf-mute” this use appears to researchers to be inadequate, since deaf people think (Furth, 1966; Mousseau, 1969; Poirier, 2005; Benvenuto, 2004, 2011), and can produce more or less intelligible sounds (Ehram, 2012). Among the philosophers, we find reflections on the thought, capacities, and behaviors of the deaf. The most animated discussion was between Descartes and Kant. While Descartes (1992) felt that the deaf have aptitudes equal to other people, Kant claimed that they would have no rational capacity. As quoted by Ehram, the philosopher of *Critique of Pure Reason* thought that “those who are Deaf from birth, and condemned thereby to remain also mute, can never access more than an analogon of reason [...] It is hardly conceivable that the ‘deaf-mute’, if he could speak, could express more than physical impressions since he has no means of conceiving of other ideas” (Ehram, 2012: 643–644). The difficulties encountered by hard-of-hearing and deaf people thus give rise to misunderstandings and controversies. Controversial and divided positions on the deaf worldwide have consequently favored the emergence of scientific studies in different fields (Mott, 1899; Oléron, 1946; Alegria, 1999; Benvenuto, 2004; Niederberger & Prinz, 2005; Niederberger, 2007; Petit, 2014; Duchesne et al., 2017).

Discussions about deafness often lead to very different considerations. In this context, the deaf and hard of hearing are viewed from both a medical and a socio-anthropological perspective. The socio-anthropological hypothesis is supported in contrast to the medical perspective, in that it defines deafness as the sociolinguistic and sociocultural characteristic of a minority linguistic and cultural community (Poirier, 2005).

The deaf replace the sense of hearing with the sense of sight (Grognoz, 2010³). The absence and the lack of hearing can be caused by a hereditary hearing loss (Liu et al., 1994; Smith et al., 2004; Angeli, Lin & Liu, 2012),

an ear infection, a head trauma; but it is most often linked to prolonged noise exposure and aging. Thus, there is congenital deafness and acquired deafness. When the ear is not functioning properly, the brain finds it increasingly difficult to hear, interpret, and understand surrounding sounds. Whether a person has a slight, moderate, severe, profound, or total deafness, this problem can put a person in a situation with disability and social difficulties, if this person does not have appropriate supports.

8.3 A few words about autism

Unlike deafness, autism is a neurodevelopmental disorder. But like deafness, it is a hot subject of debate in many circles (Dugué & Dépestre, 2017; Mondésir, 2019; Sabin, 2020). However, in Haiti, little academic work is devoted to it. Scientific research proper does not pay too much attention, although cases are numerous (Wamba, 2020; Michel, 2020⁴).

Coined by the Swiss psychiatrist Eugen Bleuler, the term *autism*, from the ancient Greek *auto*, is described as a pathology generating typical withdrawal behavior similar to cases of schizophrenia, preventing the subject from interacting with others. In 1944, Austrian psychiatrist Hans Asperger published “Die autistischen Psychopathen im Kindesalter,” a study of four children presenting symptoms similar to the children observed by Kanner (1943). In 1982, British psychiatrist Lorna Wing translated Asperger’s research into English, and her work became the authoritative guide to autism. In the years 1982–1983, Lorna Wing proposed a triad of traits as a benchmark for understanding and diagnosing autism from the work of Hans Asperger, who like Kanner had already thought, at the same time, of a childhood form of autism. Published as Asperger’s syndrome, this autistic triad featured a communication disorder, significant difficulties in social interaction, and repetitive and stereotypical behaviors.

In Haiti, there is a glaring lack of interest in understanding the phenomenon, even though some speak of genetic predisposition, metabolic imbalances, immune dysfunction, or environmental factors, despite a multifactorial origin of ASD. Professionals are unanimous in recognizing the need for applying a consistent protocol by mobilizing various specialists. Many clinical and psycho-educational methods exist, while specialists can claim high accuracy at diagnosing the phenomenon. However, while these diagnoses are made early elsewhere – from the age of three and even earlier – this seems of little concern for Haitian educational officials.

8.4 Deafness and autism in Haiti: diagnosis, reception, and perception

Haiti has institutions for deaf and hearing-disorder children in several regions. These institutions offer schooling and support services. The Institute Montfort (Institut Montfort), located at Croix-des-Bouquets

and founded in 1957 by the Congregation of the Daughters of Wisdom (Congregation des Filles de la Sagesse), takes care of deaf children from the most disadvantaged families in the country; the St-Vincent Center, founded in 1945, is located in the heart of Port-au-Prince; the Mennonite school of Mussote, in Paillant, specializes itself in the education of deaf children.

The diagnosis of hearing disorder and loss is usually made in the private clinic of an ORL⁵ specialist at the request of a pediatrician or a teacher, or in response to parental concern. There is no institutional obligation with respect to this diagnosis because it does not determine the subject's degree of invalidity for possible medical, social, or financial support from the State or any other non-governmental structure. It is done according to a protocol common to all professionals working in this area.

On the other hand, people with autism are more difficult to spot, and institutions that can offer them specific support are very rare. The testimonies we collected and the available data indicate that the phenomenon of autism is often underestimated and misunderstood, both in family and in institutional settings (Blanc, 2015⁶; Jean-Baptiste, 2019⁷). The plight of this category of children in school or elsewhere does not appear to be a concern for policy makers and education officials. Not many autistic children are diagnosed as such. Rather than using appropriate procedures, these children's symptoms are sometimes mistaken for psychosis, or they are regarded simply as victims of bad luck (WHO/PAHO, 2010; Wamba, 2020).

Because of cultural barriers, ignorance, and unqualified staff, autistic people are often abandoned (Ayibopost, 2018⁸). They are rarely talked about in society. The few establishments that support psycho-educational treatment for autism in Haiti do so without state support. With the exception of testimonials and clinical approaches suggesting variability in symptoms, the spectrum of autism disorder is often confused with other conditions. With the exception of Judite Blanc's work on autism in Haiti (2015), and the reflection produced by Joel Michel (2021, see supra) in his doctoral thesis, scientific thought does not give a privileged place to autistic subjects. This explains why many of the common ideas associate it with wickedness and suggest unconventional therapeutic approaches. We set up a study day with the theme *Autism and the family: understanding, accepting and living better*, organized by the Haitian psychology association (AHPSY) in collaboration with Autism 509, on December 3, 2020.⁹ Eight people, including psychologists specializing in ASD, parents of autistic children, activists, and defenders of children's rights were given the opportunity to share their experiences and talk about the disorder from a multidisciplinary approach.

8.4.1 Deaf and autistic: between rejection and exclusion

How children with autism (even if unsuspected, because undiagnosed) and the deaf are received in Haitian schools is not accommodated with

their needs. The issue of inclusion immediately arises (Lainy, 2020). The difference between inclusion and integration (Hinz, 2002; Plaisance et al., 2007; Philip, 2012) is not well established. The integration (specialized school environment) is prioritized as principle by which students are forced to adapt to the school. This is not advantageous for them (Doudin & Ramel, 2009; Le Capitaine, 2006; Russo et al., 2014; Boissin, 2015).

From a health and educational point of view, no educational system, no institution, no ministry can say how many autistic and deaf children there are in Haiti and how they cope with their condition. Before the earthquake of January 12, 2010, only 1.7% of disabled people of school age were admitted to school, i.e., 2019 children out of a population of 120,000 disabled people identified according to a survey conducted by the School Adaptation and Social Support Commission (CASAS, 1997–1998) on behalf of the Haitian Ministry of National Education. Cases have clearly increased, given the appalling disasters the country experienced in January 2010 and October 2016. However, as there has been no recent full-scale investigation in this area, we still rely on these data. Hard-of-hearing impaired and deaf children are not as ignored as autistic ones, because certain aspects of deafness are recognized as a disorder and there is an accepted institutional response, even though it is far from ideal in terms of care for socialization and education.

8.4.2 Deaf versus sociolinguistic realities in school

Haitian deaf and hard-of-hearing children face a multilingual reality. Three languages jostle in their schools. These are (1) *sign language*, normally their first language; (2) *Creole*, the language of the socio-cultural and sociolinguistic environment in which they live, their second language (Dubuisson & Bastien, 1998); and (3) *French* as a foreign language, the language of instruction to some extent in Haiti (Lainy, 2017; Govain, 2017). It is impossible to overlook the complicated sociolinguistic reality where two official languages coexist, based on educational and linguistic planning (Berrouët-Oriol, 2012), and in which the deaf are forced to learn to cope. Because deaf children have no perception of the sound world, only signs and writing allow them to communicate. They have access to oral speech and can make the link between the oral and the written.

Since these children are marginalized, and usually rejected by family and society, can we place this rejection of the other in the historical pattern of the relationship of domination common in Haiti, which opposes weak and strong, poor and rich, women and men, children and adults, blacks and mulattoes? The social representation melding disability and difference in Haiti seems to be so ingrained in each individual that it is passed down from generation to generation. It seems to result from a socio-cultural construction placing the medical categorizing of disability above social discourse. What is the impact of social and educational views of disability on the process of learning to write in this audience of students

made up of deaf and hard-of-hearing students? What explains why deaf children are seen more as impaired beings than as people simply different from hearing people?

8.4.3 Objectives and hypotheses

The objective of this study is to present the learning process writing in a group of children seldom included in the overall system of education in Haiti. These are children who are hard-of-hearing and deaf. This research attempts to answer this question, which takes up the essence of those we have just raised in the previous paragraph: How does the absence of support services, special teacher training, and inclusive education policies impact the strategies for learning to write in hearing-impaired and deaf children?

We take as an assumption that “educational policies applied in Haiti are fundamentally discriminatory insofar as they do not provide for adapted support services and special training plans for teachers to welcome all children of school age in an inclusive and equitable manner.” Hearing-impaired and deaf children are more stigmatized and penalized because of their conditions, instead of being treated as understood by Benvenuto (2004) as a group belonging to a minority cultural and linguistic community requiring a customized socio-educational approach and specialized teaching.

We will try to show that the learning difficulties of hearing-impaired and deaf children are linked both to the problem of teacher training, to the applied education policy and to unsuitable support services. This is why we began by defining *deafness* and *autism*. A brief review of the history and background, their etiology and their contextualized diagnostic mechanism show us where we stand. This has allowed us to briefly consider the state of representations and the education policy applied in this area in Haiti.

8.5 Study methodology and research protocol

8.5.1 Field of research

In addition to the other respondents (teachers and school directors), the children constituting the study population belong to two establishments specializing in providing deaf children with basic education, located at Croix-des-Bouquets, near the capital of Haiti, and in Paillant, a town in the geographic department of Nippes. These schools welcome hearing-impaired and deaf students. Primary schools were chosen because this is where these children, rightly or wrongly qualified as deaf, learn to develop their first language (sign language) in an institutional framework and will initially encounter the written word.

One school is the Montfort Institute. The other is a Mennonite missionary school in Paillant in the department of Nippes. To streamline the text, establishment 1 refers to the Montfort Institute and establishment 2 to the Mennonite school.

8.5.2 Establishment 1

This establishment for deaf children has been in existence since 1957. It has more than 500 students from kindergarten to baccalaureate, as well as a vocational stream. It was established by the congregation of Daughters of Wisdom (Filles de la Sagesse), nuns of the Catholic Church.

8.5.3 Establishment 2

Paillant, a town located on the heights of the Nippes department, is home to our second facility for deaf children. The Montfort Institute was selected because of its capacity, while the Mennonite missionary school was chosen to compare the reality of the provinces versus conditions at an institution located in the Port-au-Prince area. The establishment 2 welcomes students of all ages, from grades 1 to 9. At both schools, we focused on students in grades 3, 4, and 5.

8.5.4 Sampling and population

Since deafness is the focus of the study, we will be using the terms “hard-of-hearing” and “deaf.” This will highlight the dominant and official tendencies to meld deficiency and difference. This should help us better understand the phenomenon and define our field of study. From the outset, we use the terms “hard-of-hearing” and “deaf,” to which we add the expression “deaf people with associated autism,” not only to categorize the elements of our study but to indicate that this study audience is not homogeneous.

8.5.5 Data collection

Data collection methods and tools (the protocol for tests and writing production activities) were used for this research work, in the classes (3rd, 4th, and 5th). We set up an observation grid allowing us to identify relevant information in connection with the previously chosen indicators (language, lexical and morphological skills, sound equipment, student behavior, teacher posture, study contents...).

8.5.5.1 Protocol for taking tests and writing production activities

To measure the deafness of the subjects concerned, we proceeded in two ways: (1) by applying audiometric tests using an audiometer. This screening

and diagnostic test establishes hearing acuity in each ear. It was submitted according to a strict protocol, a standard test. We used the Audiometric device from Electronica Technologies, model 600 M, composed of a Sennheiser HD200 Pro headset with high sound insulation, an audiometric box, a 1 m USB cable, multi-user software running on Windows and accessible in multiple languages on a USB stick.

Before proceeding with the diagnosis and hearing assessment, we filled out a form with the name of the school, the teacher, the class, the student's sex, the date and the time of the test. No information relating to the student's identity will be mentioned here. Aliases have been used to ensure anonymity and confidentiality. Variables such as date of birth, intensity in dB, degree and type of deafness were considered.

After carrying out the screening and hearing assessment, we analyzed the diagnostic documents existing in the schools in question. Both establishments performed a hearing assessment before and during schooling by otolaryngology (ORL or ENT) professionals. Diagnostic files for the pupils were provided by the school administrators. In these documents, we have observed that the deafness is unilateral, affecting completely one ear for some students, and bilateral, i.e., existing in both ears for other. We reviewed all the diagnostic sheets made, noting in our document designed for the same model of audiometer. The life story and testimony were a very effective tool for this study. In order to deepen our research, we set up a focus group with the teachers of the selected classes. Once a week, we held a free discussion with the teachers. At Montfort Institute, they were all women, with one exception. However, at Mennonite missionary school, he was a man. During this focus group, participants discussed their difficulties in explaining certain concepts to hearing-impaired and deaf students, and those with associated disorders, for example. This system for sharing information and pooling teaching strategies was a rich data source for our work.

We ultimately set up a series of semi-structured interviews with school principals and teachers to collect information allowing us to make an ethnographic description of the student body in order to understand the school environment, sociolinguistics, and socio-professional categories of families. To assess performance in reading and writing, we used, in addition to tests taken from textbooks, the two standardized tests that are *L'E.c.o.s.e* (Lecocq, 1996) and *L'Alouette-R* (Lefavrais, 2005).

8.5.6 Autism screening and diagnostic tools

Tests were administered to cross-diagnose deafness with autism as an associated disorder. The denomination of "deaf people with autism as an associated disorder" is attributed to a group of children in this survey population, after they showed signs similar to autism spectrum disorder (ASD). Two categories of tools were used to verify our hunches on this subject. The first

is a screening test. The second is a behavior assessment tool. These are the AQ (Autism Spectrum Quotient) tests for children and adolescents in three versions (child, adolescent, adult) designed by the National Institute Health Research and Autism Research Center at the University of Cambridge (Baron-Cohen, Hoekstra, Knickmeyer & Wheelwright, 2006) to detect the signs and symptoms of autism. We administered it by testing subjects on: (1) social interactions, (2) communication, (3) attention to detail, (4) alternation of attention, and (5) imagination.

Secondly, the ECA-R test (Revised autistic behavior scale/ *Échelle de comportements autistiques révisée*), a test scale intended to assess the behavior of children in whom a pervasive developmental disorder (PDD) has been suspected (Barthélémy & Lelord, 2003), is applied. This test of 29 items presented in the form of a table grouping together the majority of signs of autism according to the diagnostic and statistical manual of mental disorders (DSM), makes it possible to verify the signs observed during the AQ test.

The QA and ECA-R tests were chosen for their psychometric properties (sensitivity, specificity, predictive value, validity, precision) and because they are able to predict the percentage, detect the presence and indicate the absence of a suspected disorder. The tests were administered by the researcher, Ralphson X, and a psychologist and sign language interpreter working at CASAS, Rose G.Y. Deaf children with autism are labeled as such because they show symptoms of ASD, in addition to being screened for deafness.

8.5.7 Socio-ethnographic profile of students and parents

Most of these students come from disadvantaged and unprivileged families whose parents are mostly unemployed and often illiterate. At the Montfort Institute, students receive education from kindergarten to secondary school. There are also students following professional training in cabinet making, sewing, and cooking). Some of them are enrolled late, and are often beyond the normal school age, which explains the very high rate of over-aged students in these establishments. We were previously interested in the third, fourth, and fifth grade classes – 8–9 years, 9–10 years, 10–11 years, following a plan from the Ministry of National Education which expects the class levels to correspond to these ages. We found that this was not always true in practice.

Our observations at the Mennonite School were not too different. This institution accommodates children whose parents are mostly absent. In addition to being a traditional school, it is a vocational training center where children board to learn a trade. Some are very old (up to 22 years old), compared to the level of basic education. It has a population of 75 deaf and hard-of-hearing students.

The duration of the data collection was not the same for the two schools. Data were collected over three months in Institution 1, while in Institution 2, the process lasted 18 months, from October 2018 to March 2020.

8.6 Results

The pedagogy of teachers and the climate in which the students evolve were discovered partly from the interview and focus group sessions, and partly from the official documents we analyzed. According to the audiometric tests, 63 students, composed of the hearing impaired and deaf, participated as respondents in this study on learning to write. There were 24 girls and 39 boys from 8 to 22 years old. Eight teachers were also involved in this study at the rate of two per class in establishment 1, including the two administrative and pedagogical managers. In the classes of establishment 2, only one teacher was assigned in three classes. This sample allowed us to better focus or compare the subjects. The first two tables which follow summarize the number of pupils concerned and the classes to which they belong (Tables 8.1 and 8.2).

Table 8.1 Establishment 1: 3rd grade

<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
6	8	14	2
4th grade			
<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
4	13	17	2
5th grade			
<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
6	7	13	2

Source: *Breakdown of pupils by sex and by class / establishment 1*. Data collected by a psychologist and sign language interpreter, November, 2019.

Table 8.2 Establishment 2: 3rd grade

<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
3	4	7	1
4th grade			
<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
2	3	5	1
5th grade			
<i>Female</i>	<i>Male</i>	<i>Total</i>	<i>No. of teachers</i>
3	4	7	1

Source: *Breakdown of pupils by sex and by class / establishment 2*. Data collected and administered by the researcher, Ralphson X, January, 2021.

Classes by the number of students by sex, the total number of students, and the number of teachers.

Sampled on the basis of our study objective, the students of this school made it possible to collect data relating to the phenomenon of disability and the ideas held about them and their situation.

Among the children concerned, 38 were diagnosed with total deafness, including unilateral and bilateral deaf, 23 with profound deafness, and 2 with severe deafness. Tables 8.3–8.5 summarize the data we collected from this student population. Indicators relating to the variables: code, date of birth, age, sex, level of study, intensity, type, and degree of deafness are considered.

The duration of the data collection was not the same for the two schools. Data were collected over three months in Institution 1, while in Institution 2, the process lasted 18 months, from October 2018 to March 2020.

In both schools, grade 3 included pupils whose age was well beyond the normal school age. Most have complete hearing loss.

Table 8.3 Grade 3 students from both schools

<i>Identifying code</i>	<i>Date of birth</i>	<i>Sex</i>	<i>Grade</i>	<i>Hearing degree in decibels dB</i>	<i>Type of deafness</i>
F3-001	17-09-2012	F	3	98	Profound
M3-002	11-11-2011	M	3	96	Profound
F3-003	16-04-2012	F	3	94	Profound
M3-004	07-02-2011	M	3	111	Profound
M3-005	06-06-2011	M	3	100	Profound
F3-006	06-10-2013	M	3	95	Profound
F3-007	01-01-2012	F	3	94	Profound
M3-008	18-05-2010	M	3	125	Total
M3-009	08-08-2012	M	3	117	Profound
F3-010	19-07-2012	F	3	120	Total
M3-011	22-09-2012	M	3	124	Total
F3-012	11-10-2010	F	3	126	Total
F3-013	09-01-2012	F	3	122	Total
M3-014	22-02-2012	M	3	93	Profound
M3-015	21-10-1999	M	3	121	Total
M3-016	11-07-2003	M	3	123	Total
F3-017	12-02-2009	F	3	120	Total
M3-018	09-07-2005	M	3	122	Total
F3-019	03-02-2002	F	3	125	Total
F3-020	06-01-2007	F	3	120	Total
M3-021	05-06-2005	M	3	121	Total

Source: These data from Institutions 1–2 and results of survey obtained by the researcher, Ralphson X and an investigator. They come from databases stored at INUFOCAD and managed by GIECLAT. They were collected during the research project titled: *Students with disabilities, pedagogical practices in the areas of Haiti (South, Grand'Anse, and Nippes)*.

Table 8.4 Grade 4 students in both schools

<i>Identifying code</i>	<i>Date of birth</i>	<i>Sex</i>	<i>Grade</i>	<i>Hearing degree in decibels dB</i>	<i>Type of deafness</i>
M4-001	13-03-2011	M	4	93	Profound
M4-002	18-04-2010	M	4	100	Profound
M4-003	17-05-2009	M	4	94	Profound
F4-004	05-01-2010	F	4	97	Profound
M4-005	12-10-2010	M	4	124	Total
M4-006	11-09-2010	M	4	96	Profound
M4-007	30-06-2010	M	4	92	Profound
M4-008	17-05-2010	M	4	92	Profound
M4-009	06-02-2010	M	4	104	Profound
M4-010	21-11-2009	M	4	98	Profound
F4-011	29-09-2010	F	4	127	Total
M4-012	05-07-2010	M	4	123	Total
F4-013	02-02-2009	F	4	122	Total
F4-014	28-12-2010	F	4	120	Total
M4-015	08-02-2007	M	4	122	Total
M4-016	11-08-2002	M	4	120	Total
F4-017	08-10-2007	F	4	120	Total
F4-018	09-12-2008	F	4	124	Total
M4-019	03-02-2004	M	4	120	Total
M4-020	02-12-1998	M	4	124	Total
M4-021	11-05-2003	M	4	122	Total
M4-022	22-05-2002	M	4	120	Total

Source: These data from Institutions 1–2 and results of survey obtained by the researcher, Ralphson X and an investigator. They come from databases stored at INUFOCAD and managed by GIECLAT. They were collected during the research project titled: *Students with disabilities, pedagogical practices in the areas of Haiti (South, Grand’Anse, and Nippes)*.

Comparing the variables “type of deafness” and “Hearing degree”, the data provide a basis to discuss disability or difference about this category of students.

Many students in grade 4 are over the age of basic education. As shown in Table 8.3, majority of them have complete hearing loss.

Comparing the variables “type of deafness” and “Hearing degree,” the data provide a basis to discuss disability or difference about this student’s category.

The data presented in Tables 8.3–8.5 mainly provide information on the degree of hearing loss.

Comparing the variables “Type of deafness” and “Hearing degree,” the data provide a basis to discuss disability or difference about this category of students.

As suspected at the observation stage, the AQ test results revealed autistic traits affecting the functioning of some respondents. Nine students with total deafness were affected by this problem. Traits of pervasive developmental disorder are identified, although it would be important to

Table 8.5 Grade 5 students in both schools

<i>Identifying code</i>	<i>Date of birth</i>	<i>Sex</i>	<i>Grade</i>	<i>Hearing degree In decibel dB</i>	<i>Type of deafness</i>
M5-001	08-01-2007	M	5	88	Severe
M5-002	16-12-20	M	5	83	Severe
M5-003	09-01-2008	M	5	120	Total
M5-004	09-02-2008	M	5	123	Total
F5-005	01-07-2009	F	5	120	Total
M5-006	18-01-2010	M	5	123	Total
M5-007	01-01-2009	M	5	124	Total
F5-008	19-08-2009	F	5	98	Profound
F6-009	20-09-2010	F	5	95	Profound
F7-010	20-01-2008	F	5	98	Profound
F5-011	06-05-2010	F	5	94	Profound
F5-012	14-02-2009	F	5	97	Profound
F5-013	18-03-2009	F	5	97	Profound
F5-014	13-03-2009	F	5	124	Total
F5-015	06-12-2007	F	5	126	Total
M5-016	08-11-2007	M	5	121	Total
M5-017	24-02-2005	M	5	120	Total
M5-018	12-01-2004	M	5	123	Total
M5-019	09-08-2007	M	5	124	Total
M5-020	11-03-2003	M	5	122	Total

Sources: These data come from databases stored at INUFOCAD and managed by GIECLAT. They were collected during the research project titled: *Students with disabilities, pedagogical practices in the areas of Haiti (South, Grand'Anse and Nippes)*. They are from Institution 2, and results of survey obtained by the researcher, Ralphson X and an investigator.

make more advanced clinical and multidisciplinary evaluations to complete the diagnosis. Among deaf people screened as having ASD, the ECA-R and AQ made it possible, in addition to their deafness, to assess problems in the major socio-cognitive functions of subjects such as: social withdrawal, non-verbal communication disorders, disturbances in emotional sharing, disturbances in attention, problems fixing gaze and making eye contact.

8.6.1 *Written learning and production*

Authors have shown that people with autism often have difficulty with letter recognition and production (Pennington & Delano, 2012, Dockrell et al., 2014; Godde et al., 2018). The tests that we administered to the children listed in this group (especially autistic Deaf) did indeed reveal worrying deficiencies (in written production) indicating their clumsiness in this area. The following sample is an example (Figure 8.1).

Deaf and deaf people with autism as an associated disorder that we observed had enormous difficulties with motor skills, when they write. They also had poor visual acuity. This seems to explain why they have a

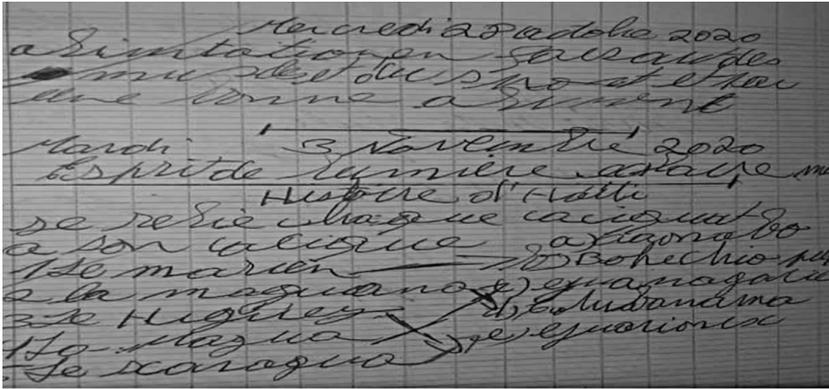


Figure 8.1 Writing sample from a deaf student in 5th grade with autism as an associated disorder, at Establishment 1. This test was administered by the researcher, Ralphson X, on January 19, 2021.

hard time performing well in the lip-reading techniques their teachers apply. The way they form the letters indicates that they have not mastered the techniques of organizing the graphics space (see Image I). They also find it difficult to respect the constraints of time.

Attention deficit and behavioral disorders were also observed. These children are unable to keep up with the class. Establishment 1 created a separate space for them, but the assigned teacher did not appear to have the pedagogical skill to look after students who are both deaf and deaf with autism. This category does not seem to have flourished, because the institution does not have the necessary expertise to help them. Autism and educational deficiencies both increase their difficulty in learning.

8.6.2 Learning to write and pedagogical practices

To facilitate memorization in deaf students, teachers ask them to read a text repeatedly, using lip-reading techniques they are supposed to have already learned. The pupils have read the text for a good ten minutes. Examples of the type: “Lè w repete plizyè fwa ou sonje byen, lè w ekri sa w repete, ou sonje pi byen... / lorsque vous répétez plusieurs fois, vous mémorisez mieux; lorsque vous écrivez ce que vous répétez, vous mémorisez mieux...” (when you repeat several times, you memorize better; when you write down what you repeat, you memorize better), are common at the start of instructions. The deaf observed generally produce sounds that are not audible to the teacher. An investigator questions the principal school of the Montfort Institute about the pedagogical methods being applied here.

INVESTIGATOR: *What pedagogical method do you use to help deaf students learn to read and write?*

THE PRINCIPAL REPLIED: *At Montfort Institute, we focus on lip-reading and sign language at the same time.*

Teachers spend a lot of time on the meaning and spelling of words through large posters and / or a video projector. Reading comprehension and production is difficult for hard-of-hearing and deaf students; forgetting words and/or confused letter orders are common; some of their writing is incomprehensible; spelling errors and omissions are common: “Ques” for “quels” (which), “Les rivires” for “Les rivières” (rivers), “Qu’est que torrent?” instead of “Qu’est-ce qu’un torrent” (“What is a torrent?”). Consider the following sample as typical of one of the students (Figure 8.2).

Regarding the use of lip-reading as a method for teaching students to write, the investigator asked the following question:

Why do you also use the lip-reading method even for children who are not completely deaf?

The principal responded:

Our approach is comprehensive. This method is good for both hearing and non-hearing people; because you follow the gestures and the sounds produced by the movement of the mouth while speaking. None of the school staff, the teachers, cook, secretary, and so on, who are hearing, are not forced to master sign language in order to communicate with deaf students.

Student difficulties are also linked to the training of teachers. It is well known that the two main traditional methods for learning the written

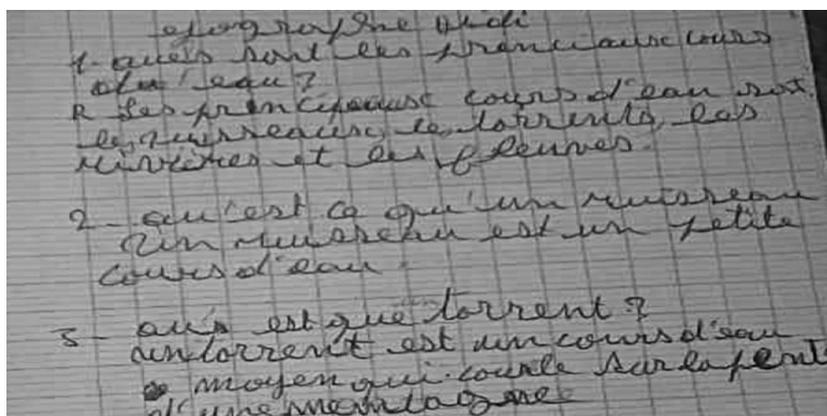


Figure 8.2 Writing sample from a deaf student in 3rd grade. This test was administered by an investigator on January 20, 2021. Data in database stored at INUFOCAD and managed by GIECLAT.

language are: synthetic methods known as syllabic or alphabetical (learners begin writing by reading letters, phonemes, monemes, syllables and words, then by combining them), and analytical methods, starting with large units of language then coming down to minimum units: words, monemes, phonemes, letters ... (Ratus, 1994). For these deaf and hard-of-hearing children, our observations showed, as the principal suggested, that 76% of teachers use written methods focused on lip-reading, while 24% of them use other translation-based methods and strategies.

Out of eight teachers interviewed, two received specialized training during initial teacher training. They reported that they received continued training in sign language, management of those with special educational needs, and disorders DYS.

It was reported that, since 2010, institutions have been admitting children born deaf, 80% of whom are unable to read, write, or follow along in the classroom. Some teachers report problems simply because deaf people write with their left hand or form letters in a direction that differs from the form they call "standard."

At the Montfort Institute, teachers have a special working room and a resource room equipped with an interactive digital board, which they use to project certain images that can facilitate the understanding of concepts related to writing.

At Mennonites school (at Paillant), it was observed that deaf students have difficulty producing basic, meaningful writing. In this school, the school principal and teachers who are mostly deaf, only use translation techniques to teach. They do not receive any special pedagogical training. The lip-reading method is seldom used. The sign language translation that they offer does not solve the problem of comprehension and academic performance. Textbooks also do not meet the specific needs of students, many of whom are unable to write readably. Their difficulties in recognizing and reproducing written forms are mainly attributable to a poor vocabulary, ignorance of the syntax of the target languages (Creole and French), and techniques for organizing the graphics space. These are samples taken from the productions of two students of grades 4 and 5 (Figures 8.3 and 8.4).

Exercises taken from the *L'E.c.o.s.s.e* test revealed that these students have great difficulty interpreting pictures and matching them with simple sentences. Not only does what they sign not reflect the content of the images, but the correspondence between the labialized image and the written signs is also erroneous. They have difficulty finding the exact lexicon, doing writing practice, and respecting the writing space. When asked to sign a sentence that has been spoken to them, they have done so without error, but writing any spoken sentence appears to be a very difficult exercise (cf. Pictures III and IV).

The difference between the deaf and the deaf with autism is not a major one in this area. More than 80% of them, experience spelling,

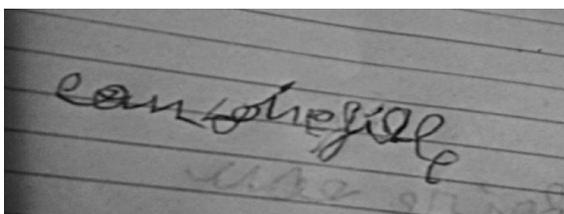


Figure 8.3 Sentence sample produced by a student of 4th grade, after observing an image whose interpretation would be: The girl drinks water. This test was administered by a psychologist and sign language interpreter on November 12, 2019.

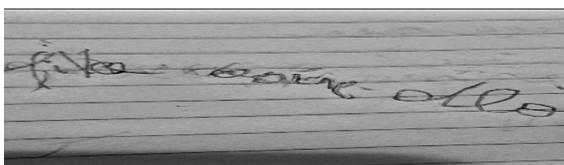


Figure 8.4 Sentence sample produced by a student of 5th grade, after observing an image whose interpretation would be: The cow drinks water in the river. This test was administered by a psychologist and sign language interpreter on November 13, 2019.

morphological, and syntactic difficulties in learning to write in relation to the school setting, understanding visualization, and memorization. Those who are only deaf sometimes move from gesture to script to make themselves understood in writing. The deaf with autism have behavioral problems in addition to problems learning to write. Problems related to attention deficits, Down syndrome, etc., increase their difficulties in reading, writing, and comprehension. A lack of conceptualization was observed among them: “*elèv sa yo gen pwoblèm pou yo nonmen objè*”/These pupils have problems naming objects,” as one teacher told us. The teachers had enormous difficulty in helping them build a written representation of what they were signing. Among many others, motor skills and letter recognition problems are major difficulties encountered by students in this category.

8.6.3 Plurilingualism/Multilingualism and the deaf

More than half of the students selected for this study, or 62% (39 out of 63), have deafness whose cause dates back to birth, according to information obtained from officials of the institutions where they are educated. At Montfort Institute, an official report: *in the case of 43 students concerned by your research, approximately 27–28 are in this situation (born deaf). Even so, since the earthquake of 2010 we have seen more cases of deafness born due to genetic diseases.* According to her, *half of all cases of hearing loss are due to*

life events, in addition to hereditary origin, multiple causes must be considered: infectious diseases of the ear, taking drugs toxic to the ear, exposure to loud noise or prolonged exposure to noise.

At Mennonite School, where fewer students participated in the survey, we also found that the majority of children in boarding school were born deaf. These data imply that sign language is the first and natural language of this majority of students.

The Haitian school system advocates French-Creole bilingualism, but almost all the teachers at these two establishments (of course, hearing people) use sign language and Creole to teach. However, school materials are almost all in French. This puts these students, whose first language is sign language, in a complicated trilingual sociolinguistic situation: two languages officially imposed by the school that they do not know and a third which is theirs.

In this context, sign language is the main medium through which these students have access to knowledge and to linguistic subjects such as French, Spanish, and English, but it is not mastered by all teachers. During our study, a deaf teacher in the fourth grade at Montfort Institute signed to explain that she was using sign language as the language of instruction for all subjects. Interpreting her message, the interpreter realized that she felt her pedagogy is different from that of her colleagues because she is both deaf and a teacher. She feels proud of the work she does, because her students attend to her more than to her colleagues. In her classroom, peer discussions are often noticed. The pupils interact a lot, compared to those of other teachers whose interactions with the teachers are not very visible.

8.6.4 Inclusive education policy?

The notion of inclusion exists in official educational documents. But the Haitian state does not provide the means to implement the recommendations it makes. No curriculum adapted to the educational needs of deaf and autistic children has been observed, despite official instructions. With the exception of a few schools, notably the Montfort Institute, the Center Saint-Vincent and the Mennonite missionary school, where the effort to offer a more or less adapted context is observed, children in difficulty generally follow the same courses and educational paths as those called able-bodied.

The scanty information available and the glaring lack of data on the number of children with special needs enrolled in schools is proof that this phenomenon is not of concern to the Haitian government and education officials.

These deaf children and hearing-impaired, whose communication system differs from that of hearing people, are generally considered to be special cases. When registering, the adults who accompany them often say

they are helping a neighbor, so as not to reveal family ties. Cases of abandonment are recurrent. *It is always like that, when they come with the kids, they never say if it is their kids. They are ashamed to say it*, reports an official from the Montfort Institute. Children are rejected because of their deafness and their communication system. Parents and other family members fear embracing their difference. The testimonies and observations have shown that the exclusion and stigma that began in their immediate surroundings are not fought by the school: *We welcome them with pleasure. And in fact, we only have these kids here. In addition to the classical school, there is vocational training. But other schools do not offer these options. What does the government propose?* says one school official.

Many deaf and hard-of-hearing children are abandoned by families. Residential school appears to be a response to this situation. There are parents who permanently leave their children at the Institute for several reasons, says an official. The first concerns the marginalization and social construction of disability. They want to get rid of it as quickly as possible. A disabled child is seen as a huge burden on the family, while the “able-bodied” child is seen as a generator of wealth – a long-term investment that can be useful (profitable) to himself and for his parents. Investing in a disabled child, on the other hand, would be a waste. The second reason is economic gain. This is the most common. The parents of these children are for the most part people who have no income and who live in a difficult and precarious socio-economic situation: no profession, no job, no social security. The deaf or disabled child is unwelcomed because it would increase the economic burden on the family. This attitude is an obstacle to his schooling and his social integration. The negative representation of this audience is synonymous with rejection of the other, generating a kind of fatalism in the sense that Gardou (2010; 2011) and Campergue (2011) intend it.

8.7 Discussion

8.7.1 Lip-reading is not inspired by differentiated pedagogy

Learning the written language is complex for any learner, whether hearing or non-hearing. While institutions welcoming so-called “normal” children adapt their standardized teaching methods as necessary to achieve this result, “specialized” childcare centers should also adjust theirs to help deaf and hard-of-hearing people learn. We know that not all deaf people have the same experiences, the same skills, and do not require the same arrangements to perform a task. However, the observations we made and the testimonies we collected during this study indicate that the teaching methods used, whether lip-reading or translation carried out in class, do not take into account the peculiarities of each child. Nor is work prepared and envisioned according to the specific needs of those with autism as an associated disorder, whose cases require a more tailored approach.

Teachers at the Montfort Institute combine lip-reading and behavioral methods to help deaf and hard-of-hearing children. The oralizing phase is used to achieve the set objectives. Overall, this does not appear to meet student needs, although it does produce some results, compared to the translation techniques that Mennonite School teachers favor to help their students learn.

The introduction of the deaf to writing by the visual-graphic method (Foucambert, 1980) and the phonographic approach (Gombert, 2002) calls not only on sight, but also on the technical capacity for reproducing graphic signs. Auditory problems are too serious to allow the deaf to recognize phonemic contrasts between syllables, and between single words. As Barrouillet et al. point out, “the information read on the lips has the same temporal organization as the information heard, both being two traces of the same activity: articulation” (2007: 141).

Brought to the grapho-visual experience from French and Creole, these deaf people confuse monemes like *mi* and *mu*, *ça* and *sa*, *da* and *do*, *na* and *ma*, *ra* and *wa*, the words *moisson* and *maison*, *chanson* and *chantons*, *aussi* and *ainsi*, and in Creole, *pli* and *plus*, *bri* and *bruit*, *fri* and *fruit*, *case* and *chasse*, *danse* and *chance*. This is because of the similar labial configuration of these linguistic units.

Some teachers neglect the inputs that the pupils could provide, they are unwilling to use sign language, to involve them, when information read on the lips has the same temporal organization as oral information.

One of the reasons for the underperformance of these students is the application of pedagogical methods that do not take into account the complexity for the deaf of learning to write. Sign language, their natural and first language, is relegated to the background, compared to two target languages (French and Creole) which coexist in the school environment. The third reason is the short time allotted for teaching writing.

At Montfort Institute as well as at Mennonite missionary school, the teaching methods are not differentiated, while the audiometric tests showed ethnographic data that indicate that this public is made up of deaf and hard-of-hearing people (see above, Section 8.5). Those whose hearing problems are related to infectious disorders or any trauma, as well as those who are totally deaf or cophotic, are accordingly mixed. The results shown in the tables above show that the hearing level of the 63 students studied varies from severe impaired hearing severe to total absence of hearing (see Tables 8.3–8.5). This suggests that they should have received different educational treatment.

8.7.2 Deaf, process of written learning, and dominant teaching model: disability versus difference

According to the collected data, those born deaf (congenital deafness) and those with acquired hearing problems are all considered impaired. Not

being able to speak and learn through hearing (French or Creole) is seen as an insufficiency, an illness, even if the person appears to be in good health. Thus, instead of being the mark of a difference that characterizes this group of students, sign language is seen rather as a deficiency that requires special attention.

Sign language is not used in the schools as a medium of accessing knowledge, but as a means of helping these pupils attain the languages of instruction, French and Creole, the languages of learning and knowledge, the languages of socialization which would allow them to “hear.” It is felt to be a language of transition, relegated to the background in relation to the languages of hearing people. These students are not considered as people with a specific and effective linguistic device, different from the language of hearing people, but as those with a language disability which requires compensation measures and compassion (Nadeau & Machabée, 1998). They are forced into a multilingualism that does not enhance their first language, but tries to normalize their situation, to restore their hearing lost by human efforts and equipment (audiologists, speech therapists, hearing aids, etc.). On this basis, Benvenuto is right to write that:

sign language is perceived as the means given to the deaf pupil to reach the official language and having done so, to access the knowledge offered by the one who holds the power, the teacher who can hear. It emerges from this that the ideology that placed the deaf in the category of disability through political and social devices, limits the way we regard him as a distinct individual. School integration, whether individual or in small groups of deaf people in a hearing class, even in the presence of assistants or sign language interpreters, is, in my opinion, the way to implement the discourse of disability in the modern version of social exclusion.

(2004, 85)

For this group, learning to write leads us to analyze the facts collected from the angle of discourse opposing difference and disability, through which some try to dilute the identity of the deaf, as a community in its own right (Lipiansky, 1998), and others of ideas advocating their rehabilitation in their physical specificity and their socio-cultural particularity (Poirier, 2005). The identification of deafness with disability is the dominant view in the observed schools, which generate classroom practices focused on the transmission of readymade knowledge. These classroom practices are not designed to help students act, participate in the process of learning, improvise, and interact. Students are not put in a process of sharing and experimentation, which could help them gain self-confidence.

These students are nicknamed deaf-mutes. This appellation is the one by which we designate this community of people in families and in society,

to say that they would be incapable of producing sounds, whereas it would be reasonable to speak of deaf-signers, it being understood that they are holders of a very sophisticated device of gestural units of the second articulation, pertaining to the “kinological,” designated under the term “kineme,” by analogy to the phoneme of the language of hearing people (Barrouillet and Billard, 2007). According to those authors, the structure of their language has a configuration that can be described according to five parameters: the configuration of the hand, the position, the orientation, the movement, and the facial expression associated with it (Ibid. 142). On this basis, the idea of Poirier (2005) of considering deaf people as a community of meaning, according to their language and their representation of the world different from that of the majority of hearing people, seems to us to be relevant.

8.7.3 Rejecting of deafness as a way of self-defense

Institutions for the protection of the rights of people with disabilities (Handicap International, CMB, UNICEF, BSEIPH) fight for the inclusion of people with special educational needs, in Haiti, but deaf and hard-of-hearing students do not always receive the treatment they deserve. They are ridiculed and marginalized. Their marginalization does not come only from the external environment, but also from their parents who often develop a behavior of self-defense which consists in rejecting and abandoning them so as not to be the object of criticism and contempt.

The data and testimonies received indicate that the boarding school and reception centers are of great help to these deaf people. Usually, they are rejected by hearing people (strangers and relatives), because they do not follow the same stages of development as they do and are deprived of the type of language that would allow them to perceive the world according to their expectations. They are ironically called *soudeurs* and *bèbè*, to minimize their way of being and their communication system. This rejection from their family is a social construct that the medical discourse conveys and supports.

Poirier defines culture, from an anthropological point of view, as “a set of practices, knowledge and values created historically and actively transmitted from one generation to the next” (2005: 61), to recall that “deaf people belong to a cultural community distinct from that of hearing people” (ibid.), insofar as they use the signed language to communicate. Benvenuto tells how, at the end of the nineteenth century, the French doctor Ladreit de Lacharrière wrote that “deafness prevents the development of language and makes you forget it. It stops the progress of intelligence and places the child in a state of inferiority which he will always feel” (2011, 19).

The disparaging discourse on deafness goes back centuries, just as the conception that arose out of the belief that it is a phenomenon that generates a different community is not new. Deafness cannot be a cause of

debility. As Ferran writes, it was Victor Hugo himself who, in his support for the deaf community and for sign language, notes: “What does deafness matter when the mind hears? The only deafness, true deafness, incurable deafness, is that of intelligence” (2018: 50).

Since sign language is like that used by hearing people, a device, a system made up of constraints and standards, as some authors point out (Canguilhem, 1975; Mottez, 2006; Benvenuto, 2011), it allows the deaf to evolve in a universe that is neither more nor less complex. Some deaf people speak of normality, and of their belonging to this universe. In doing so, they reply to the dominant concept of rejecting all that is different.

8.8 Conclusion

Because the traditional school arrangements and language formats are limited, the majority of students in this study do not perform well in reading and writing. They have difficult learning experiences, because they evolve in complicated socio-educational contexts diluting their identity and underestimating their ability to let go of the constraints that stimuli impose. Teachers and school officials admit that the negative representations and received ideas circulating around them are causes of penalization and blocking but seem to have no solution. Because their first and natural language, sign language, is primarily used as an element of passage to the learning of French and Creole, the two teaching mediums in the Haitian educational system, many of these children are ignored and neglected. As they operate in a socio-academic environment where primacy is given to the medical discourse of disability, their deafness is seen as a deficiency, not as a mark of belonging to a different socio-cultural and linguistic community.

Students with deafness from birth are, like those whose hearing problems occur throughout life due to infectious diseases of the ear, taking toxic drugs, and high exposure to noise, considered to be people living with a disability. The difference between someone who is known to be deaf, based on medical tests and examinations from birth, and someone who faces these difficulties in life, is not established. They are all, in practice and in speech, considered as deficient people, both socio-linguistically and medically. In school and around them, the dominant view is that their means of communication, namely sign language, is underestimated. In school, the methods and strategies used to teach them are so dependent on the accepted teaching model for hearing people that they prove ineffective. Some teachers try to involve them by repeating gestures, but there is little synchronization between their particular realities and the school environment in which they attempt to learn.

This work on deafness takes into account autism as an associated disorder, with a view to seeing the impacts on the process of learning to write in deaf people. From this perspective, a window is opened on these two

phenomena as an object of research in Haitian schools. While emphasizing the debate opposing the medical discourse to the socio-anthropological discourse of disability, it challenges the reader to the need to apply inclusive educational policies taking into account adapted reception structures and specialized training for teachers which support people with special educational needs. Data has shown that many deaf and hard-of-hearing people are formally diagnosed before entering school, while no information regarding children with the autism spectrum has been released. This does not seem to be part of the concerns of socio-educational actors, because they ignore this phenomenon which further complicates the functioning of this category of students. What can we expect if we teach students disabled in a particular way if you do not understand it? What can we expect if we continue to diagnose the deaf as impaired by erasing their differences?

Notes

- 1 We extend our sincerest gratitude to Professor Louis-Pierre Janvier, the coordinator of CASAS, and Rose Gasline Dalisma, psychologist and sign language interpreter at CASAS, who helped with the collection of analytical data for this chapter. Despite this, we are responsible for the analysis and conclusions.
- 2 “Deaf but not dumb!”: Let’s use the exact words, consulted on June 15, 2021: https://www.lavenir.net/cnt/dmf20161023_00903609/sourd-mais-pas-muet-utilisons-les-mots-exacts
- 3 Anne Grognoz, Information on hearing and deafness for teachers, consulted on July 4, 2021, on the site: 2012. Hearing and deafness (https://www.vd.ch/fileadmin/user_upload/organisation/dfj/sesaf/oes/ECES/ECES_2012_Audition_et_surdit%25C3%25A9_c.pdf).
- 4 Education of students with disabilities in Haiti: organization, inventory and experiences of parents of children with autism spectrum disorder (ASD), thesis in preparation, University Paris 10, by Joel Michel, consulted on July 3, 2021, on theses.
- 5 Otorhinolaryngology.
- 6 “Santé : L’autisme, un problème peu connu en Haïti” (Autism, a little-known problem in Haiti), consulted on June 17, 2021, on the site: Santé : L’autisme, un problème peu connu en Haïti (alterpresse.org).
- 7 “L’autisme : le trouble infantile très peu connu par la grande population haïtienne” (Autism: a childhood disorder little known to the general Haitian population), consulted on June 21, 2021 on the site : L’autisme : le trouble infantile très peu connu par la grande population haïtienne (lenational.org).
- 8 Ayibopost, Haitian children also suffer from autism, consulted on June 13, 2021, Autisme : les enfants haïtiens en souffrent aussi – AyiboPost.
- 9 Un grand colloque sur les troubles du spectre de l’autisme (TSA) en Haïti - Omniscient Info | Le média de l’Éducation (A major symposium on autism spectrum disorders (ASD) in Haiti), consulted June 15, 2021.

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