LUMEN ET VIRTUS

Methodological design focused on a reality of inclusive education in elementary school final years

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ABSTRACT

To meet this proposal, the qualitative research was what contemplated the organizational dynamics of the investigative process, as it is an approach that has greater flexibility for adjustments and possible adjustments, generating greater autonomy to the proponent in decision-making, without detracting from the requirement of a lot of reading and reflection from the researcher. Given this option of qualitative research approach, this article aims to present the outline of the methodology that involves situating the approach and type of research, its instruments and techniques, as well as their path in the research process developed in the field of reality where curricular strategies for students with special educational needs were analyzed from the perspective of inclusive education.

Keywords: Inclusive Education, Elementary School Final Years, Elementary School II, Special Education.

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INTRODUCTION

Since the school of basic education is the field of this investigation, the qualitative approach provided a process of continuous planning, previous strategies and actions carried out, in addition to the possibility of interaction between the participants and the researcher. For Chizzotti (2003, p. 223), there is a symbiosis of theoretical orientations that underlie qualitative research:

> Qualitative research thus harbors a semantic modulation and attracts a combination of tendencies that have coalesced, generically, under this term: they can be designated by the theories that underlie them: phenomenological, constructivist, critical, ethnomethodological, interpretationist, feminist, postmodernist; They can also be designated by the type of research: ethnographic research, participant, action research, life history, etc.

In the context of research, appropriating the needs of the investigation provides the understanding of the possibilities to guide the organization of the collected data. Qualitative research was chosen as an alternative proposal to quantitative research, since the former favors a better contextualization of the analyses intended here, about a school daily life (BAUER, GASKEL, 2002; TRIVINOS, 2008; GIBBS 2009; MINAYO, 2010).

For Günther (2006), the most evident difference between qualitative research and quantitative research is in the dynamics established between the researcher and his object of study.

The concept of qualitative research is stated by Godoy (1995, p.62) as "[...] the study and analysis of the empirical world and its natural environment". The observations of phenomena in the field of education have a multiplicity of manifestations that demand strategies that investigate the experiences analyzed in the school space. Guerra (2006) attributes multiple individual intersections to the requirement of a global view of events in order to achieve the results of the research. The role played by the researcher in understanding the study environment permeates the experiences and mastery of knowledge with the object of study.

By instrumentalizing a data analysis, either through observations or semi-structured interviews, qualitative research generates a flexibility that demands a systematization of the research in order to detail the actions in the field. However, it is not appropriate for the researcher to be accommodated due to the lack of rigidity in the requirements that a quantitative research proposes, as Chizzotti (2003, p.232) points out:

> The awareness and commitment that research is a valid and necessary practice in the solidary construction of social life, and the researchers who opted for qualitative research, when deciding to discover new investigative avenues, did not intend and do not intend to evade rigor and objectivity, but recognize that human experience cannot be confined to nomothetic methods of analyzing and describing it.

For an orientation that relates some important aspects for qualitative research, Gibbs (2009) listed seven characteristics necessary for the choice of this approach, namely:

- Have an interest in experiences in the natural context of research and have access to documents;
- Establish hypotheses and concepts in the development of the research process;
- Adapt theories and methods to the object of study;
- Understand their importance as a researcher related to behavior, their identities and know how to interpret situations arising from the field;
- Carefully analyze the context and the "case" being studied;
- Base their reflections on written texts, such as: field notes, transcripts and descriptions of data records;
- Undertake quality in qualitative research, including constant evaluation.

The fact chosen in this study about the qualitative approach associated with the case study, having as a product the making of a documentary, constitutes a set of factors that will complement each other for the production of knowledge in the area. In this sense,

> The qualitative approach preferentially works in the "discovery context", although [...], the possibility of incursions into the "verification context" is not excluded, to the extent that studies can be planned to investigate whether relationships in other contexts or through other methodologies are confirmed (ALVES, 1992, p.57).

Thus, in the planning based on the qualitative approach, some actions were thought of during the fieldwork. In this case, it was established that the themes thought for the object of study and conceived in the development of the research, required a review and constant evaluation of the study so that qualitative flexibility was in favor of the research.

The constitution of the participant group to carry out qualitative interviews, among other data collection techniques, occurs by sample representativeness (MINAYO, 1998). This sample conception of interviews is considered by Fraser and Gondim (2004, p.148) as a representativeness "[...] of most of the members of this group inserted in a specific context".

The research of the phenomena existing in the researched context requires the construction of stages that comprise rules in the production of the research. In the case of qualitative analysis, it is essential to understand the differences and similarities of the form of observational recording and the interview. According to Duarte (2002), the elaboration of an interview script and the formulation of questions, with a qualitative approach, becomes arduous in the process and due to the circumstances, as it is a critical exercise according to the listening of the recordings and the reading of records from open questions.

METHODOLOGY

From this approach and among the types of research pertinent to it, the case **study research** was chosen, given the context of the investigation and the relationship with the subjects. According to André (2005, p.33), in this type of research, "one of the advantages of the case study is the possibility of providing a deep and at the same time broad and integrated view of a complex social unit, composed of multiple variables".

Bogdan and Biklen (1994, p. 89-90) corroborate this line of investigative thinking when they describe that "[...] the case study consists of the detailed observation of a context". They also argue that in observational case studies, as characterized in this work, the "participant observation and the focus of study are centered on a particular organization [...] and the sectors of the organization, traditionally, focus" on: [1] a specific location (e.g., classroom, teachers' room); [2] a specific group of people (e.g., teachers on a team); [3] a school activity (e.g., planning actions for students with some specificity).

The case study is based on the *locus* of uniqueness, that is, unity is an object to be studied. In this way, the researcher's deepening of the case study will take place in the particularity, as an example, of the characteristics of the subject or of a relevant context for the investigation (ANDRÉ, 2005; MARTINS 2008; COIMBRA; MARTINS, 2013; YIN 2015). For Bressan (2000, p.5), "the definition of unit of analysis is linked to the way in which the study questions were defined".

As a type of research, the case study carefully understands a social context. Because it provides specific data, the case study is suitable for research proposals that have a delimited target audience and seeks to detail the environment. According to the authors Meirinhos and Osório (2010), the characteristics of the qualitative investigation articulate with the essence of the case study. The empirical character of the investigation of a given phenomenon seeks to identify social and cultural practices where there is a plurality of hypotheses and evidences. (MARTINS, 2008) and based on the intention of the research, it is worth thinking about the strategies to deepen the phenomenon addressed.

The essential factor for the exploratory condition of the case study is to provide the researcher with a desire to investigate and make discoveries. According to Yin (2015, p. 4) "the more your questions seek to explain some present circumstance (for example, "how" or "why" some social phenomenon works), the more the case study method works". According to the same author, there are five important components, which can also be understood as stages for case study research:

1- Raise questions from the case study,
2- If there is one, to establish propositions,
3- Identify the unit(s) of analysis,
4- Articulate data with possible propositions,

5- Interpret the concepts and findings through defined criteria.

The interpretation of the facts from the perspective of the case study requires an approach that dynamizes the complexity of each issue addressed. Understanding a certain real context can be problematized according to their experiences and descriptions of what is conceived as reality. Thus, the investigation is a continuous act that is attentive to the multiple possibilities of understanding the purpose of the case study (MARTINS, 2008).

An aspect that emphasizes the plurality of ideas and interpretations is the conflicts between concepts and the choices made to represent some evidence. In the search for information, a set of collected data should be available in the case study, because:

> The researcher must also be prepared to make use of several sources of evidence, which need to converge, thus offering conditions to affirm the reliability and validity of the findings through triangulations of information, data, evidence and even theories (MARTINS, 2008, p.60).

The qualitative research associated with the observation case study does not restrict the investment in the presentation of data, including quantitative data, for an exposition that emphasizes some issue. The case study proposed in this research adhered to a large number of participating subjects in a single institution. "In educational research, the units that originate the case studies are usually the school organizations or one or more students or one or more teachers" (SARMENTO, 2011, p.138).

In this context, the object of study to be analyzed was previously designed to maintain a unit to be investigated. Access to the research site was essential for the type of research chosen. It was not enough just to obtain permission to be in the environment, but to establish a relationship of trust with the subjects and understand how the hierarchy of the place is organized. This relationship of reliability must transpose a behavior of observance and seriousness in the investigation without losing the condition of being well liked by the research subjects.

The case study option for this research consists of the dimensioning that the investigation presents on the interest of understanding a particular piece of data. The competent techniques of distancing from the studied context refer to immersion in the environment with the effort to critically analyze the characteristic aspects of the place, subjects or group studied.

LOCATION OF THE RESEARCH

In order to carry out the research in the context of school inclusion, with the objective of bringing together teachers of the common education of EF-II, to understand the existence of practices of teachers of specialized educational service (SES), as well as students, there is a need to analyze which institutional aspects characterize the actions of special education in the chosen institution.

The location of this study has become a viable field of research due to its historicity and recognition in society as quality teaching. In addition, the components necessary to carry out the research, such as the target audience of elementary school II and systematized actions in the area of special education, are present in the selected field.

It is a public educational institution founded on December 2, 1837 and has as a highlight the projection of students to professions of expression and formation of political cadres, of social and cultural relevance. It is currently institutionally recognized as a Federal Institute of Education (IFE). Its structure corresponds to 12 *campuses* in the city of Rio de Janeiro, an early childhood education unit and two *campuses* located outside the municipality of Rio, one in Niterói and one in Duque de Caxias. In all, almost 13 thousand students are enrolled in the schooling process that includes Early Childhood Education, Elementary School, High School and Integrated Education and Youth and Adult Education (Proeja), in addition to the offer of Lato Sensu and Stricto Sensu postgraduate courses.

Among the *campuses* present in the city of Rio de Janeiro and outside it, São Cristóvão (CSC) was chosen for this research because it presents the possibility of access to the field, as well as a context that encompasses the proposed research objectives. Close to the Luiz Gonzaga Center for Northeastern Traditions (Feira de São Cristóvão) and Quinta da Boa Vista, in addition to serving complete Basic Education, it houses the General Directorate Unit of the Institution with a large administrative sector, a sports complex with sports courts, swimming pool and athletics track, in addition to a professional master's program in basic education practices.

In this scenario, the field of investigation corresponds specifically to the context of Elementary School II (CSCII). The distribution of schedules in the curriculum is established as follows: in the morning shift, classes are from Monday to Friday from 7:00 a.m. to 12:00 p.m., in the afternoon shift from 1:00 p.m. to 6:00 p.m. On Saturdays from 7 am to 11:10 am and in the afternoon from 12:00 pm to 4:10 pm. In table 4, which follows, we can see the number of class times of 45 minutes, per subject, corresponding to each year of schooling.

Table 4. Weekly class times by subject and year of schooling in Elementary School II

Curricular Components	Number of weekly times per year of schooling			
Disciplines	**6th**	**7th**	**8th**	**9th**
Portuguese	5	5	5	5
English	3	3	3	3
French	2	2	3	3
Music Education	2	2	2	2
Visual arts	2	2	2	2
Physical education	2	2	2	2
Educational Informatics	2	2	x	x
History	3	3	3	3
Geography	3	3	3	3
Social sciences	X	2	2	2
Sciences	3	3	3	4
Mathematics	4	4	5	5
Drawing	2	2	2	2
Total	**33**	**35**	**35**	**36**

Source: Website of the Institution page that is the focus of the research[2].

Understanding the planning of the curricular components and the pedagogical organization of Elementary School II subsidizes the analysis of how curricular diversity emanates in the final years of Elementary School.

Based on the National Curriculum Parameters (PCN/BRASIL, 1998), the document on the Political-Pedagogical Project (PPP, 2002) guides the curricular proposal of this school, and is valid until the present day. Called the Second Segment of Elementary School, the philosophical concepts of citizenship and a methodology that forms cognitive competencies dictate the importance of these aspects to continue the curricular proposal of Elementary School I or First Segment as stated in the document, and to forward the skills that give perspective to students in High School.

The emphasis of the PCN's orientation on the PPP of the research field school is proven in the organization of curricular components and competencies in cycles, in the curricular design that indicates specific competencies in the disciplines to be achieved at two levels[3] and the defense of the transdisciplinarity of knowledge.

Sixteen concepts of transdisciplinary competences are listed in the PPP of this school to achieve the objectives of each disciplinary content. Santos (2008, p. 75), clarifies the articulation of disciplinary and transdisciplinary knowledge as follows:

> Transdisciplinary knowledge is associated with the dynamics of the multiplicity of dimensions of reality and is supported by disciplinary knowledge itself. This means that transdisciplinary research, however, must be focused on the articulation of diverse references. In this way, disciplinary and transdisciplinary knowledge do not antagonize each other, but complement each other.

[2] COLÉGIO PEDRO II. Available at: <http://www.cp2.g12.br/perguntas-frequentes/250-43-qual-a-composi%C3%A7%C3%A3o-curricular-dos-anos-finais-do-ensino-fundamental-no-col%C3%A9gio-pedro-ii.html>. Accessed on: 20 jul. 2017.

[3] The levels referred to in the institution's PPP refer to the 3rd level (5th and 6th year), current 6th and 7th year and 4th level (7th and 8th year), current 8th and 9th year. (PCN/BRAZIL, 1997)

The curricular propositions contained in the PCN document have guided, since 2002, the institution's curricular policies and practices. However, the school departments have been adapting the curricular issues recommended in the PPP to the specificities of each subject, or proposing curricular reformulations, as in the case of the Department of Physical Education, which reformulated from 2007 onwards, the competencies related to the disciplines contained in the document for the year 2002 (SALGADO, *et al*., 2016).

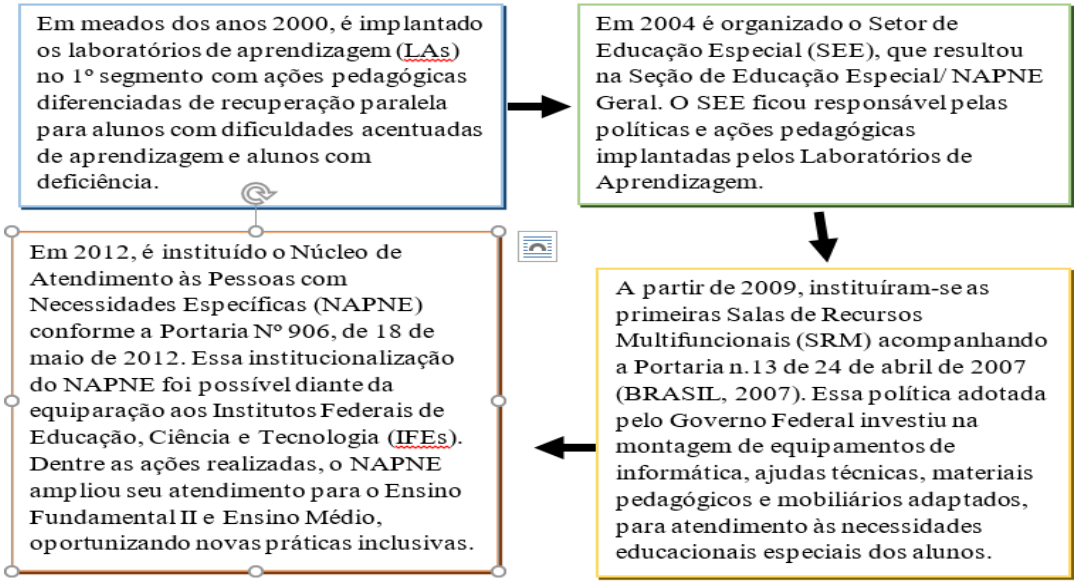
Since 2014, the institution's attention has been focused on the production of the Institutional Pedagogical Political Project (PPPI). Organized in working groups, the new document has been formulated, with reference to a base text and receiving several contributions for the preparation of the final draft. In 2017, public hearings were held, inviting the school community to participate in the debates on the partial document of the PPPI.

Unlike the partial draft of the PPPI that guarantees the discussion and presence of an exclusive chapter for Special Education, the Pedagogical Political Project produced in 2002 did not guarantee prominence for the theme, according to the analysis of school documents. The issues of the socioeconomic field and cultural profile of the students are exposed by the document as the most relevant characteristics in the discussion on school diversity.

In this way, it is necessary to have a better understanding of the alternatives offered by the institution to meet this diversity that includes students with special educational needs (SEN).

Faced with the need to serve students with SEN and to be in line with special education policies from the perspective of school inclusion, the target institution of this study began to meet this demand, in a systematic way, from the 2000s onwards, as described by Marin (2015, p.54), as it was necessary to "support an increasing number of students who had poor academic performance and difficulties in keeping up with teaching." We present below an organizational chart listing the main actions in this scenario, the target of this research.

Table 5. Organizational chart main policies adopted by the institution in the area of inclusive education.



Source: Marin (2015) and the institution's website.

This historical process of structured special education actions in the target institution of the research situates us to understand the research site. The NAPNE, of the unit where the research was carried out, is currently coordinated by a teacher and its team has a speech therapist, a pedagogue, a braille proofreader, a sign language interpreter and an educational affairs technician (TAE). [45] In 2018, according to the new school direction of the unit, there will be a change in the coordination of NAPNE, due to the end of the 2014/2017 management, causing a relocation of leadership positions.

In the 2014/2017 administration, the systematization of the nucleus on campus is attributed by actions that gave notability and investment in logistics and infrastructure to the nucleus. With the beginning of the work in 2014 as a cut, the target audience of NAPNE's actions was considered small in view of the growing supply over the years until the present day. The lack of understanding of the teachers about the actions of the NAPNE was expressed by the behavior of discomfort in being in the center, as well as presenting difficulties in dealing with the challenges posed to the teaching of students with SEN. The feeling of distrust also referred to the students in relation to the NAPNE, as indicated below.

> The discomfort generated by living with these students in the school environment was noticeable, both for the campus professionals and the students. Some professionals expressed anguish at not knowing how to deal with the situation. They looked for ways, but alone in the midst of classes with many students, they could not undertake something more effective. Other professionals tried to start a work that would enable inclusion, but, without a theoretical foundation on the specific issues that involved each case, they could not go far (FARAH; SILVA, 2017, p.57).

[5] Center for Attention to People with Specific Needs. Colégio Pedro II. Blog do NAPNE. Available at: <http://www.cp2.g12.br/blog/napnescii/parcerias-projetos/>. Accessed on: 24 jul. 2017.

For the purpose of elucidation, it is important to highlight the expansion of NAPNE-SCII actions in the first two years of the project. In the table below we can understand the high increase in the target audience for the NAPNE, having as reference the year 2014 and the year 2015

Table 6. Number of students with diagnoses attended by NAPNE

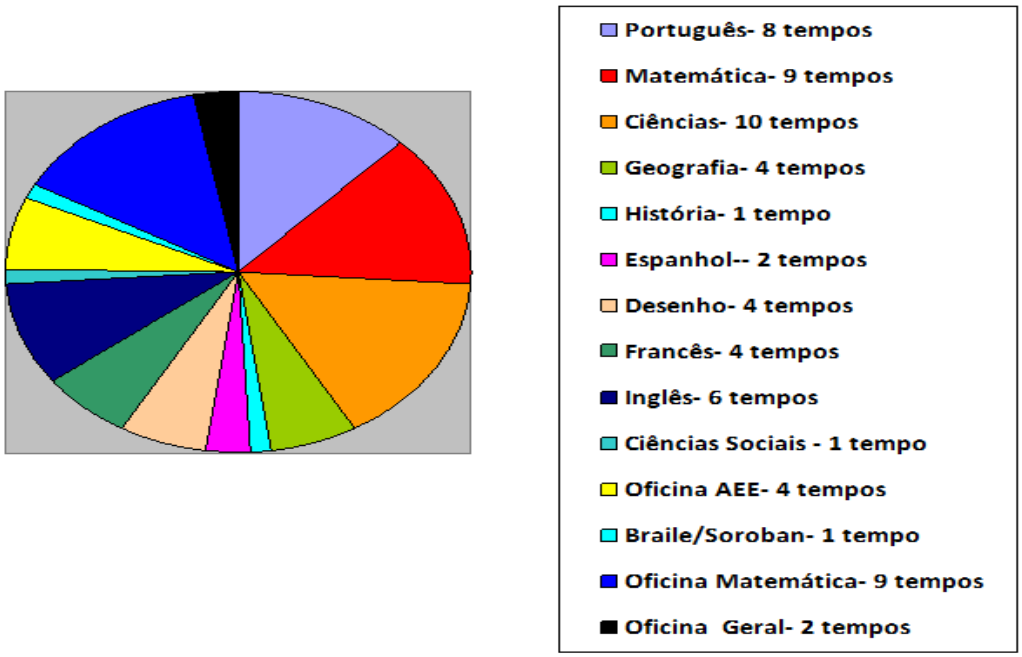
DIAGNOSIS	2014	2015
	NUMBER OF STUDENTS	NUMBER OF STUDENTS
Autism	2	2
Multiple Disability	1	2
Hearing impairment	1	2
Intellectual Disability	6	10
Physical disability	1	2
Blind	1	1
Learning disorders	0	63
Total	**12**	**82**

Source: Farah and Silva (2017) and the documents accessed in NAPNE.

The difficulty in establishing data on the exact number of students served by the NAPNE is due to the very characteristic of the center of serving "[...] each and every student who knocks on our door asking for help" (FARAH; SILVA, 2017, p.58). However, this characteristic reception of the NAPNE to students respects a previous planning of attendances related to the demands presented in the learning condition of each subject. In the 3rd certification of 2017, approximately 110 students were enrolled distributed in attendances corresponding to the subjects of Elementary School II and the workshops offered by the NAPNE team. In graph n.1, which follows, an overview of these services by the NAPNE is presented.

Currently, there are 22 teachers of Elementary School II, in addition to the nucleus team, allocating a specific workload to the activities of NAPNE. The subjects of Mathematics, Science and Portuguese obtain the highest number of attendances. The number of students contemplated in each service varies in individual and group activities, of approximately eight students. The number of students is organized by several factors: the number of teachers available for service at NAPNE, the referral by teachers of the regular shift, the skills and frequency of the attendances and workshops held in the after-shift. The dynamics of the workshops were designed to contemplate the NAPNE team, which allocated its workload to teach, differentiating itself from the service of the teachers of each subject.

Graph 1. Number of attendances and workshops/by class time, held in 2017.



Source: Documents accessed in NAPNE

The proposal of the NAPNE in this school presented possibilities to meet the demands of students with SEN in Elementary School II. This strategy meets the demands of schooling in each subject, expanding the possibilities of actions and improving student service

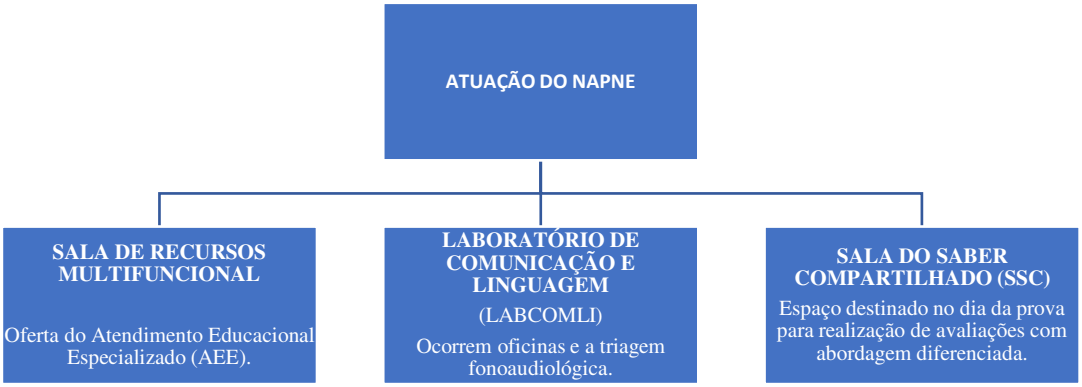
Another relevant factor is the target audience served by the center. In initial contact, for access to the field, the coordinating teacher emphasizes that the philosophy of NAPNE is to provide its actions to any student in a situation of learning difficulties, because,

> At Napne, in general, we fight for student accessibility of any nature (physical, mental, among others) so that we effectively promote, for each student, the right to belong to and participate in the groups with which they interact (FARAH; SILVA, 2017, p.55).

This endeavor aims to establish a heterogeneity of the target audience and establish the broadest possible understanding of the student with SEN. These and other singularities will be presented below in the choice of participants.

The systematization of the actions offered to students on the campus of this study can be observed according to the organizational chart below.

Table 7. Organization chart of the NAPNE actions.



Source: Documents accessed in NAPNE

The multifunctional resource room (SRM) at the school is aimed at students served by the Specialized Educational Service (SES) policy, such as: students with disabilities, global developmental disorder and high abilities/giftedness.

The activities of the Specialized Educational Service are offered in the after-hours. In the regular shift, NAPNE provides support professionals, as recommended by the Brazilian Law of Inclusion (BRASIL, 2015) and mediation in the classroom, an action carried out by an intern. The resource room has large tables with chairs, cabinets where games, pedagogical materials and documents are kept, as well as computers usually used by the NAPNE team, which can be used by students and teachers. The structure of the room composes a blackboard, generally used to give reports, in addition to other informative papers that explain the activities carried out in the center.

The Communication and Language Laboratory (LABCOMLI) works in a network with NAPNE in the screening carried out by the speech therapist and in the realization of workshops. After the referral of students by regular shift teachers, usually at Class Council (COC) meetings, these students undergo evaluations where their skills in the general scope in the field of logical, mathematical and linguistic reasoning will be analyzed. The result of these tests provides feedback to the teacher(s) about the evaluation and invites those responsible, when necessary, clarifying possible actions, such as a referral to seek neurological care for the student or explaining the need to provide care by the NAPNE in the after-shift.

The indication for the speech therapy screening can also be suggested by the Pedagogical Supervision and Guidance Sector (SESOP) and suggested by the student's guardians. Workshops are also held in the LABCOMLI room, such as the Brazilian Sign Language (Libras) workshop offered

to students and servers and the workshop offered by speech therapy, giving special attention to students with learning disorders/disorders and students who have learning difficulties. For this target audience, there is the desire of NAPNE to implement the Learning Laboratory in Elementary School II. Thus, students with learning disorders and learning difficulties, such as ADHD, dyslexia, would have a space with pedagogical actions that help in the schooling process.

The Shared Knowledge Room (SSC) provides students who demand differentiated strategies on the day of the test, with actions that help in carrying out the evaluations. This space was fundamental for the organization of a flexible and expanded calendar for holding tests. The differentiated schedule of tests makes it possible to mobilize the NAPNE team together with the teachers of each subject to carry out actions such as offering a lecturer, mediator, transcriber, among other necessary support for students.

According to some conversations held at NAPNE with the coordinator of the center, it was suggested that four 8th grade students, who were the target of NAPNE's care, be monitored for this study. Belonging to the same class, the subjects in question, together with the teachers of the school year, are the participants of the research addressed in the following item.

PARTICIPANTS

The research thought about the participation of teachers, pedagogical staff and students enrolled in Elementary School II of *Campi* São Cristóvão II.

The proposal of a study on the scenario of Elementary School II, involving curricular actions with students with SEN, was exposed and problematized as an existing desire in the target institution of this research, as informed by the coordinator of NAPNE, in the first personal meeting held at the institution itself.

Regarding the aspects that enable the research and characterization of student participants, the *UESC Campi* provides strategies on the demands of the schooling process of students with SEN by indicating that those who have difficulties in the schooling process, without the characterization of disability, autism or high abilities, are also the target of the actions developed by NAPNE. This reception with students, in the broad sense of SEN, corroborates reflections on the school curriculum and its evaluation standards.

In this context, the 8th grade class seemed to be the ideal scenario for the research proposal, identified, together with the coordinator and teachers of NAPNE, as the class that demands more pedagogical actions from teachers. The class has 33 students, in the morning shift, with the following distribution of subjects and corresponding times:

Table 8. Distribution of disciplines and their respective times

	2 FAIR	Tuesday	Wednesday	Thursday	Friday	SAT. I[6]	SAT. II
	MATHEMATICS	ED. PHYSICS	PORTUGUESE	DRAWING	MATHEMATICS	SCIENCES	DESEHO
	ENGLISH	ED. PHYSICS	FRENCH	SCIENCES	MATHEMATICS	SCIENCES	DRAWING
	PORTUGUESE	C. SOCIAL	MATHEMATICS	SCIENCES	ENGLISH	GEOGRAPHY	HISTORY
	PORTUGUESE	C. SOCIAL	MATHEMATICS	ARTS	ENGLISH	GEOGRAPHY	HISTORY
	FRENCH	HISTORY	ED. MUSICAL	GEOGRAPHY	PORTUGUESE		ARTS
	FRENCH	HISTORY	ED. MUSICAL	GEOGRAPHY	PORTUGUESE		ARTS

Source: Documents accessed at the institution

To establish an approximation with the teachers of the class, it was important to contact them to find out what was the time of the breaks between one class and another, a favorable time to schedule interviews and occasional conversations.

In this context, the teachers of class 805, the teachers who carry out activities at NAPNE and other members of this pedagogical team, in addition to the students themselves, were participants. The participation of these teachers in the research was benefited by the fact that some teachers from the regular shift carried out activities in the NAPNE in EF-II.

At NAPNE, the multiprofessional team consists of 6 professionals who have passed public examinations distributed in various functions, as we can see in the following table.

[6] The institution distributes in the academic year an alternation of subjects on Saturday called Saturday I and Saturday II.

Table 9. Characterization of the participants of the NAPNE.

FUNCTION	GENDER	TRAINING	WORKLOAD	TIME WORKING AT NAPNE
Coordinator (C1) [7]	F	Master in Portuguese Language and specialist in Inclusive Education.	40h	4 years
Braille Proofreader (T1)	F	Complete high school. Specialized in Braille Proofreading (120h)	40h	3 years
Translator and Interpreter in Libras (T2)	F	Higher Education in Social Work and specialization in Translation and Interpretation of Libras.	30h	3 years
The Pedagoga (T3)	F	Higher Education in Pedagogy, specialization in Psychopedagogy and Master's student in Diversity and Inclusion	40h	3 years
Technician in Educational Affairs (TAE)- (T4)	M	Degree in Mathematics, specialization in New Technologies in Mathematics Teaching and "Master in Physics and Mathematics with a specialty in Biomathematics".	30h	2 years
The Council (T5)	F	Higher Education in Speech Therapy, Improvement Course in Dyslexia and others, Learning Disorders and Improvement in School Diversity.	30h	3 years
Trainee (mediation - T6)	F	Studying Pedagogy.	8 p.m.	-
Trainee (T7)	F	Studying for the Pedagogy Undergraduate Program	8 p.m.	-

Source: Data extracted from the interviews given by the professionals

NAPNE also has two pedagogy interns who allocate a workload of 20 hours per week. One of the interns was allocated to act as a mediator in the classroom, according to the function called by the NAPNE, of two students from the researched class. In addition, there is a support professional to work in the class to assist a student who requires help with wheelchair mobility, personal hygiene and classroom activities such as a copy of the registration notebook on the blackboard.

The initial survey pointed out that there are 12 teachers who teach in the class in the regular shift. 8 teachers from class 805 were interviewed, according to their availability.

[7] The acronyms correspond to the position held in the institution and will be used to identify such participants.

Table 10. Characterization of teachers.

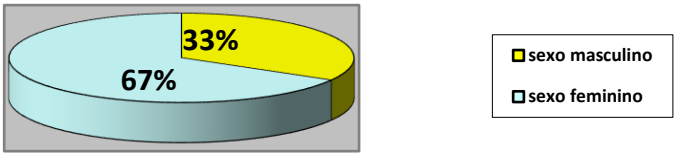
FUNCTION	GENDER	TRAINING	WORKLOAD
Visual Arts Teacher (P-1)	M	Degree in Arts and specialization in Educational Technology.	40h
History Teacher (P-2)	M	Higher Education in History	40h
French Teacher (P-3)	F	Degree in Letters - Portuguese / French and specialization in Foreign Language - French.	40h
Music Teacher (P-4)	F	Bachelor's and Master's degree in Music and Specialization in Psychopedagogy.	40h
English Teacher (P-5)	M	Degree in Letters - Portuguese / English and PhD student in Foreign Languages - English	40h
Science Teacher (P-6)	F	Higher Education in Biological Sciences	40h
Mathematics Teacher (P-7)	F	Degree in Mathematics	40h
Portuguese Teacher (P-8)	F	Degree in Letters/Portuguese	40h

Source: Data extracted from the interviews given by the professionals

The graphs below present the characterization of these, according to the description of gender, education and age group. Data were obtained through a form filled out by the participants on the days of the interviews.

Regarding the question of gender, 3 teachers answered male and 5 female teachers, characterized as follows:

Graph 2. Characterization of participants according to gender.



Source: Data extracted from the interviews given by the teachers

The teaching profile outlined in the school's PPP projected a percentage of 70.41% for females and 29.59% for males (COLÉGIO PEDRO II/ BRASIL, 2002), which is close to the data of this study.

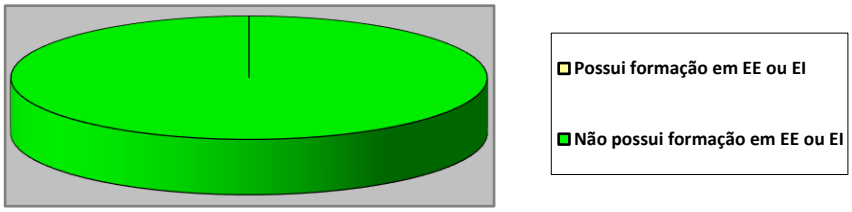
Regarding teacher training, the participants declared that they had not had any approach to Special Education or Inclusive Education. This data exposes a reality present in Elementary School II and corroborates data from other studies on the need to serve the target audience, as the authors highlight below.

> The numbers exposed in the last school sense (INEP, 2012) reinforce the urgency of improving teacher training in our country. Approximately 80% of students with special

> educational needs are enrolled in the public school system. It was possible to observe an increase in the total number of enrollments of students with special educational needs between 2011 and 2012, from 584,124 to 628,768 (a variation of 7.6%). The data also showed that more than half a million students with special needs were enrolled in elementary school, an increase of 7.7% compared to the previous year. The greatest growth in the number of enrollments in this system, however, occurred in high school, representing an increase of 24.9% (GRECUOL, GOBBI and CARRARO, 2013, p.311).

The data expose the need to meet the specificities of students "ensuring that the curricula of teacher training and training courses are aimed at preparing them to serve students with special educational needs in regular schools". (GLAT; NOGUEIRA, 2003, p.139) The reports of the participating teachers who sought to address this subject were based on the argument that they wanted to be trained in Special Education or Inclusive Education, as long as this training is offered by the reference center in the area, in this case the NAPNE.

Graph 3. Characterization of the participants on training in Special or Inclusive Education.

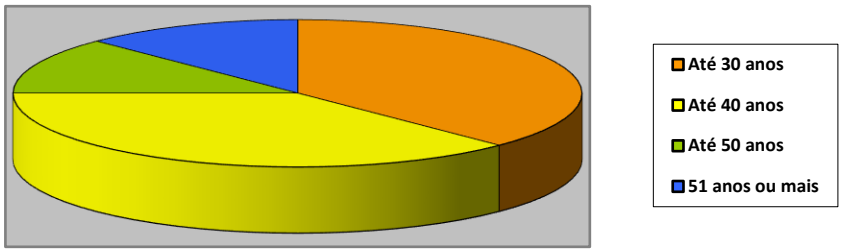


Source: Data extracted from the interviews given by the teachers

Regarding the profile of teachers, by age group, the data contained in the PPP document show that there were 1.22% of teachers up to 25 years old, 1.94% up to 30 years old, 31.73% up to 40 years old, 20.41% up to 50 years old and 5.92% over 50 years old.

In the graph below, 3 teachers declared to be up to 30 years old, 3 teachers aged up to 40 years, 1 teacher up to 50 years old and 1 teacher aged 51 years or older. According to the unit's management, the increase in teachers aged up to 30 years is due to the greater offer of temporary contracts, a workload of 40 hours.

Graph 4. Characterization of participants according to training and age group



Source: Data extracted from the interviews given by the teachers

Students from the 8th grade class attended by NAPNE at school were also participants. Therefore, we have four target students for the investigations related to this research, identified in chart 11, below.

Table 11. Characterization of the target students.

Student	Sex	Age	Diagnosis	Attendances Enrolled in NAPNE
M.	M	14	Physical disability	Mathematics
The.	F	14	Physical disability/Charcot syndrome	----------
L.	M	15	Intellectual Disability	Portuguese Science English SEA[8]
Y.	F	14	Déficit Cognitivo	Portuguese Science English SEA

Source: Data extracted from the accessed documents.

As previously stated, the flexibility of the NAPNE regarding the institutionalized strategy to contemplate students in vulnerable situations in the schooling process places the target scenario of the research in an expanded condition, as it characterizes a multiplicity of subjects with different school trajectories in relation to the curriculum and its developments in the teaching process offered, also in the school shift of the student's class.

The strategies designed for these students are based on the availability to be in the after-school sessions. Student A's infeasibility of being in the after-hours is an example. Attendance at the same time for students L and Y were designed to monitor the pair's interaction in the classroom and better structure the activities when present, as the attendance of both was a factor to be observed and articulated.

Student M also had his enrollment in the service reorganized by the change of priorities in the course and availability of the teacher. Thus, the student receives assistance in Mathematics when for

[8] The service identified as SEA was performed by the NAPNE Pedagogue and consisted of the organization of study plans to assist in the 8th grade subjects.

some reason he misses class, for example. Thus, he has the possibility of having access to what happened in the class in which he was absent.

Another essential aspect for the analysis of the students' profile is the age group belonging to Elementary School II. In the regular period, the age classification from 11 to 14 years shows[9] a so-called transition phase of pre-adolescence. The Youth Statute (BRASIL, 2015) classifies young people from 15 to 18 years old as young adolescents. The term pre-adolescent is still treated as a transition phase without a social demarcation that guarantees their empowerment in society. For Freitas (2013, p.5) "we can suggest that the beginning of puberty corresponds to pre-adolescence, that is, the end of childhood and the beginning of adolescence, a transition that can cause some impacts on family, school and social life." Thus, it is important to pay attention to these singularities comprised in this age group in order to act in the field of research in a coherent and pertinent way to the subjects involved.

FINAL CONSIDERATIONS

For Martucci (2001) there are three types of research techniques relevant to the case study, which were adopted in this study:

- Participant observation: This denomination represents the interaction of the researcher with the object of study, considering the social context and the subjects involved, and can influence and be influenced in the observation of actions.
- Interview: It is characterized by a dialogue established by two people, in which the interviewer seeks to obtain as much information as possible objectively and intentionally.
- Texts written by the subject: The experiences expressed in a field diary in the first person recorded by testimonies and other sources of information are fundamental to analyze together with participant observation and interview.

In addition, we observed the importance of articulating the application of research instruments, as one may favor the application of the other instruments and will enable, to a greater or lesser extent, the recognition of the aspects and reality that surrounds the participants and the research object.

In the first contacts, where the initial phase of the observations is already characterized, the relationship established with the coordinator of the center enabled a fundamental bond for the realization of new meetings to be held. The concern to present the NAPNE room and some employees who were present, in addition to expressing their conception in relation to special

[9] Resolution No. 7, of December 14, 2010 (CNE/BRASIL, 2010) advises that Elementary School schooling comprises the duration of 9 years, contemplating the age group of students between 6 and 14 years old. This age does not restrict other students from being able to attend the schooling process of elementary school.

education, provided a better orientation on the positions of the subjects and the dynamics of the work in the NAPNE.

Due to the dynamics of the schedules of the Elementary School II teachers and the pedagogical team, the researcher needed to adapt to the demands of the timetable, the curriculum matrix of Elementary School II (EF-II) and the institutional organization in the area of special education. Thus, it was substantial for the research to concatenate aspects such as the specific issues of the teaching and learning process of a given discipline, along with the common situations that concern the students, the target of the SEA strategies and the organization of teachers and pedagogical team.

The observations were fundamental in the organization of data collection from the study participants, in the structuring of the research instruments and techniques, which were the recording in a field diary, the semi-structured interview, the participant observation and the video recording.

Approximately 60 days of participant observation were carried out, 10 days in the classroom and 50 days in the consultations carried out by the NAPNE team in the multifunctional room, at times that varied between morning and afternoon, with a duration of 300 minutes/5 hours each day. At the end of the observation period, there were 300 hours of observation between the classroom and consultations at NAPNE.

In the context of **participant observation,** the researcher positions himself beyond the role of interlocutor, understanding the themes pertinent to the reality of the participants. For Valladares (2007), there are some important recommendations for carrying out observations, considered in this study, namely: establish a routine and observe a timely manner that meets the needs of those involved; understand existing social relations; preserve his role as a researcher and his "outsider" look at the group; maintain good contacts in the search field; knowing how to observe research errors to improve future actions in the group's approach; Research requires a legacy for the field of research.

The perception and apprehension of everyday life through the subjects' speech are inserted in a context that validates a special look at this type of record based on observation. For Godoy (1995), the researcher needs to capture the phenomenon studied considering the people involved and all the important aspects. The psychosocial characteristics related to the observations of a collective make the immersion of the existing senses an intense relationship between the researcher and his object of study. This direct relationship with the social actors of the research warns, according to Manzotti and Gerwandsznajder (2001), of a precaution both in belonging to the researched place, and in the contact and establishment of bonds with the research participants. Social actors gain prominence for their practices and must be analyzed with due importance. These interpretations and analyses are understood in the quote below as disassociable from socio-emotional issues.

> In interpretation, it is important to remember that the analyst is an interpreter, who also makes a discursive reading influenced by his affection, his position, his beliefs, his experiences and experiences; therefore, interpretation will never be absolute and unique, as it will also produce its meaning (CAREGNATO; MUTTI, 2006, p.682).

In this way, the interpretations invoke a detailed observation of the explicit and implicit particularities of the context. The formulation of hypotheses accompanies the process of observations in search of revelations contained in the researched space. In this process, the observations were able to have more informal findings of the activities described and the subjects analyzed, and the interviews complemented the social bonds for a broad understanding of the researched context.

For a better elucidation of the reports and observations collected, some resources such as images, charts, diagrams and transcription of important moments are presented in this work. Mazzotti (2006) states that the research should express to the readers the experiences of the object studied in a sufficiently descriptive way. Thinking about these strategies and resources for recording is a necessary concern to clearly transpose the experiences arising from the relationship with the subjects and the environment (COUTINHO; CHAVES, 2002).

It is important to understand the different possibilities of interviews and investigative methods. In the first contact established in the NAPNE, we observed that those involved in the activities of the center had anxieties that reinforced the hypotheses of the research problem. Planning future participant observations, the meetings were held with the character of a survey, to then outline the interview to be applied. It is important to highlight that this type of activity for the interview does not reduce the responsibilities and concerns for the execution of this instrument, but it does stimulate the exploratory phase in this investigative process. As endorsed by Duarte (2004, p.2016) "Conducting interviews, especially if they are semi-structured, open, life histories, etc., is not a trivial task [...]".

The information generated from the access to documents about the school path of the participating students, about the data on the number of attendances performed and the attendance of the students, the evaluation criteria and other issues of the daily curriculum were recorded with photographs and notes in the notebook. Some documents are available on the internet, such as the institution's pedagogical political project and some actions carried out at the school, being updated on the institution's website.

To the extent that the information provided by the interviews was collected, the scripts flexibly directed the possibilities of instigating reports that would gather more data for the study. The dynamics of flexibility of the data collected in the interviews accompanied a previous script design. The constitution of general themes and a certain freedom for the question-answer relationship

between the interviewer and the interviewee, indicated that the provocations and forms of interlocution in the interview could give rise to different referrals in the data collection.

Data collection, based on this technique, is foreseen for the moment when the consolidation of the observations offers the opportunity to perform the application of the semi-structured interview. For Minayo (2013), the semi-structured interview is ideal because it makes the number of participants more flexible, with the interviewer being able to stimulate conversations in search of collecting information and optimizing this data for the research. And, in this sense, the organization of the instrument combined closed and open questions in the perspective of extracting ideas and experiences from the subject, respecting their socio-emotional and psychosocial issues, in the construction of this reliability in the interview, because.

> [...] To establish a relationship of trust, a set of elements (feelings, thoughts, motivations) is necessary that cannot be dealt with here. But, in addition to the importance of the researcher's personal and human work, it should be pointed out that the researcher must have a deep respect for the condition of the other, for their experiences and stories (NARITA, 2006, p.27).

The application of interviews requires the researcher to pay attention to some details so that this instrument becomes, in fact, a possible means of data collection that is pertinent to its purpose. According to Belei *et al*. (2008, p.190), there are some tips on the researcher's behavior at the time of the interview that deserve to be considered:

> A good interviewer is one who knows how to listen, but listens actively, demonstrating to the interviewee that he is interested in his speech, in his emotions, asking new questions, confirming with gestures that he listens attentively and that he wants to understand his words, but without influencing his speech. It deepens the participant's account and shows attention to important details.

With the objective of extracting the maximum from the communication between the researcher and the participants, the success of the interview proposal demands the researcher's knowledge about the content of the questions and directs clear questions, generating essential data for knowledge about the object of the study. The interviews with the participants provided essential information and experiences to understand the local reality.

The interviews were conducted in the NAPNE room and in the Communication and Language Laboratory (LABCOMLI). Most of the interviews took place at LABCOMLI because the laboratory had fewer attendances in relation to the NAPNE room, helping to capture sound and reserving a space for this moment. For this moment, we used video recording to record the testimonies and audio recording, for those participants who felt more comfortable with audio, only.

And, from the articulation and systematization of these three research instruments, **video recording** was applied as a fourth instrument and means of recording the researched reality. The

purpose of this study was to "reproduce the fluency of the researched process" [...], to observe points that are often not perceived", as stated by Belei *et al*. (2008, p. 193). The images collected, in 16 sessions lasting 60 minutes each, in addition to serving to expand the characteristics and peculiarities of the observed object, served as a basis for the organization and elaboration of the product produced for this study. In addition to these considerations about this form of data collection, it is worth noting that the image record, as pointed out by Belei (*ibdem*),

> [...] offers the practice of observation and description, an additional support, a new look [...] The use of video recording has revolutionized people's daily practices and allowed advances to be incorporated into educational actions as well[...].

In addition to participant observation and semi-structured interviews, **the recording of field notes** was another instrument that, together with these two already explained, composed the means of data collection. The importance of the field notes reinforces the primordial character of this research instrument.

The field notes were produced in the context of research seen as an investigative technique of great value. Thus, an example of how the field notes were recorded is described below.

> Note from the field diary (15/12/17):
> In the NAPNE room, student M together with another classmate who forms his pair use the space to carry out a French home activity. Student M's mother is present and helps them with the activity. The work consists of reproducing in a model the rooms of a house, identifying in French each piece of furniture and its rooms. Student M's pair does not seem to be very interested in carrying out the activity and leaves the NAPNE room, leaving student M and his mother doing the activity. The French teacher enters the room and asks why student M is doing the activity alone. The evidence incites the teacher to overcome a discontent with the other student, saying that she was going to take points from the participation of student M's colleague. At another table, the Science teacher is teaching 4 students belonging to the target audience of NAPNE. The Braille Proofreader is at another table listening to an audio on her cell phone.

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