

Nothing about us, without us: students' experiences with high abilities or giftedness in Professional and Technological Education

Nada sobre nós, sem nós: vivências de estudantes com altas habilidades ou superdotação na Educação Profissional e Tecnológica

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Abstract

The present article aims to analyse and reflect on the perceptions and aspirations of seven students with High Abilities or Giftedness (HAG) in the Integrated High School of a campus at the Instituto Federal. To capture their perceptions and aspirations, the seven students responded to a semi-structured interview on the topic of HAG. This is a qualitative research, with participant observation and interpretative descriptive data analysis. The theoretical framework is based on the Theory of Multiple Intelligences, the Three-Ring Theory, and the Differential Model of Giftedness and Talented. The results point to a need for improvement in the identification and support processes for HAG students and justify the development of ongoing training for Mathematics teachers and administrators.

Keywords: High Abilities; Giftedness; Integrated High School; Professional and Technological Education; Instituto Federal.

Resumo

O presente artigo tem por objetivo analisar e refletir as escutas e anseios de sete estudantes com Altas Habilidades ou Superdotação (AHSD) do Ensino Médio Integrado de um campus do Instituto Federal. Para captar as escutas e anseios, os sete estudantes responderam a uma entrevista semiestruturada sobre a temática das AHSD. Trata-se de uma pesquisa qualitativa, de observação participante e com análise descritiva interpretativa dos dados. O referencial teórico apoia-se na Teoria das Inteligências Múltiplas, na Teoria dos Três Anéis e no Modelo Diferencial de Dotação e Talento. Os resultados apontam uma necessidade de melhoria nos processos de identificação e atendimento de estudantes AHSD e a justificativa de elaboração de formação continuada de professores de Matemática e gestores.

Palavras-chave: Altas Habilidades; Superdotação; Ensino Médio Integrado; Educação Profissional e Tecnológica; Instituto Federal.

1 INTRODUCTION

The topic of High Abilities or Giftedness (HAG) in Brazilian schools is often permeated by myths and stereotypes, hindering both the identification of HAG students and their appropriate support (Pérez, 2012). Even in this context, data from the 2022 School Census show approximately 47.4 million enrollments in Basic Education, an increase of about 714 thousand enrollments compared to the previous year. Regarding enrollments of students with High Abilities or Giftedness, there was an increase of 12.87%, rising from 23,758 students in 2021 to 26,815 in 2022, representing an absolute increase of 3,057 registrations (Brasil, 2022; 2023).

Although this increase is viewed positively, the total number of identified HAG students is still incipient compared to the expected percentage of HAG students in any given population. While the World Health Organization (WHO) predicts 3.5% to 5% of students are HAG (Unesco, 2002), the Brazilian percentage of students registered in the Basic Education School Census is approximately 0.06%.

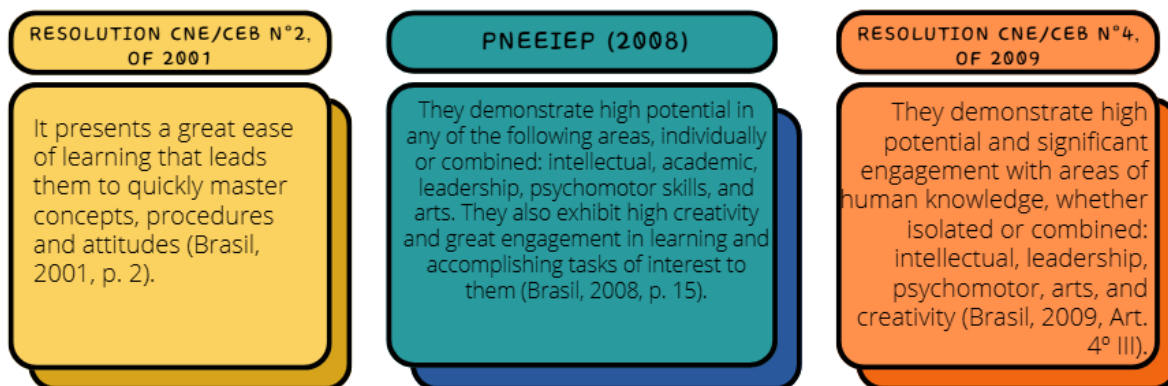
The demand "Nothing about us, without us" has become increasingly present among HAG students. It is noteworthy that the motto "Nothing about us, without us" was formalized in academic records by Sasaki (2007) and represents a demand made by people with disabilities regarding the need to think about disability issues from the perspective of those who are part of that group. Analogously, people with HAG have demanded to be considered regarding their particularities. In this sense, this article aims to analyze and reflect on the perceptions and aspirations of seven students with High Abilities or Giftedness in the Integrated High School (IHS) program at a Federal Institute (FI) campus, in order to bring important elements to the process of professionalizing this educational space on the topic of HAG. This is a cutout from a doctoral research, titled <omitted by the author>, from the Postgraduate Program in <omitted by the author> at the University <omitted by the author>, whose general objective is "to investigate processes that can promote the National Special Education Policy for students with High Abilities or Giftedness at a Federal Institute campus".

2 THEORETICAL FRAMEWORK

When talking about High Abilities or Giftedness, the perceptions each person makes about the subject and about HAG people are often quite distinct. There is a range from the perception of geniuses like Albert Einstein and Marie Curie to images of prodigies as broadcast by news programs and TV shows. Although such cases are part of the world of High Abilities or Giftedness, they are far from representing the majority of cases.

In terms of legal documents on High Abilities or Giftedness, there are definitions present (1) in CNE/CEB Resolution No. 2, of 2001, (2) in the National Policy on Special Education from the Perspective of Inclusive Education (PNEEIEP), of 2008, and (3) in CNE/CEB Resolution No. 4, of 2009 which, according to Figure 1, state that HAG students are those who:

Figure 1: Definitions of High Abilities or Giftedness

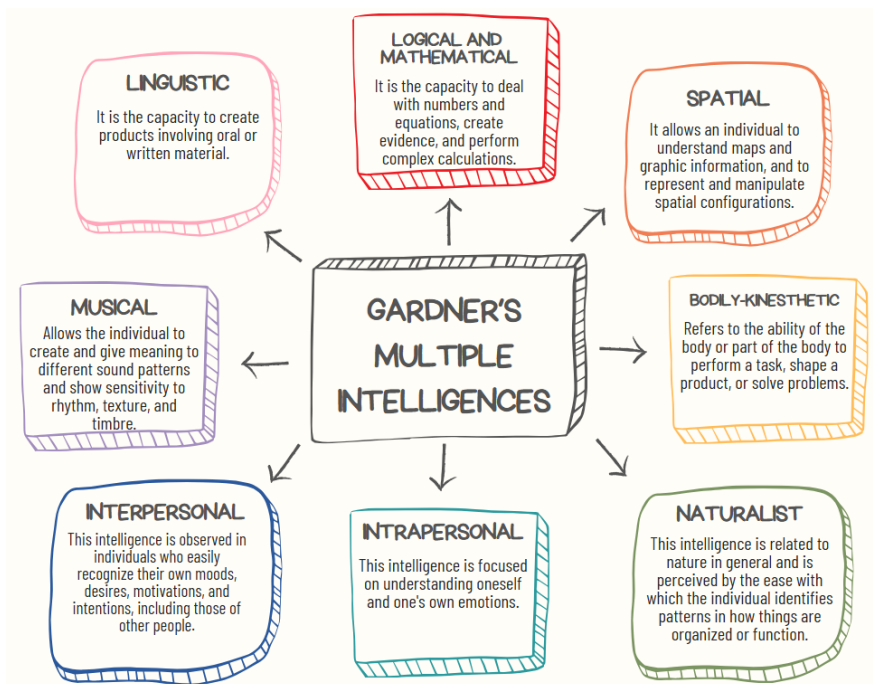


Source: Brasil, 2001; 2008; 2009.

Observing Figure 1, it is clear that while the 2001 resolution addresses aspects such as ease and speed of learning, the PNEEIEP (2008) and the 2009 resolution focus on potential in isolated or combined areas. It is noted that the definitions from 2008 and 2009 bear similarities to Gardner's Theory of Multiple Intelligences and Renzulli's Three-Ring Theory.

The understanding of the construct of Intelligence changes over time, ranging from a unidimensional view to more current multidimensional versions, such as Gardner's Theory of Multiple Intelligences (1995), Renzulli's Three-Ring Theory (2018), and Gagné's Differentiated Model of Giftedness and Talent (2021). Gardner's theory was widely accepted in Brazilian schools due to its proximity to school reality, understanding intelligence as capacity in various domains of human knowledge, subdivided into eight abilities, as shown in Figure 2:

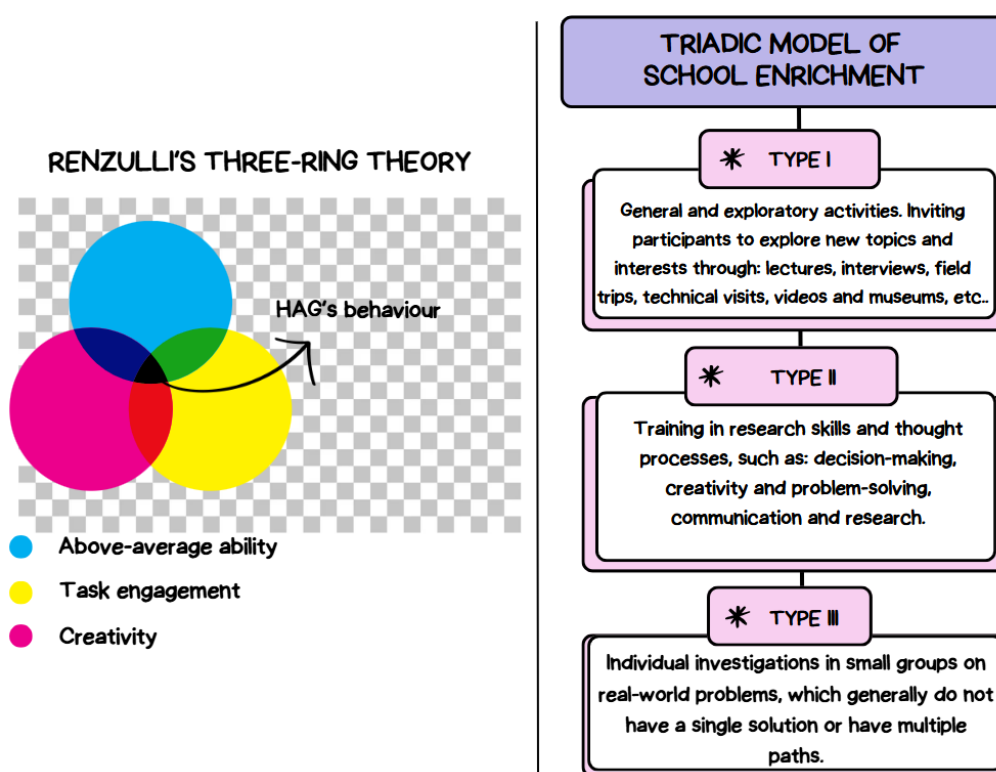
Figure 2: Gardner's Theory of Multiple Intelligences



Source: Gardner, 1995; Adapted from Virgolim, 2019, pp. 75-77.

Renzulli's Three-Ring Theory (2018) seeks to answer the question: "Who are people with High Abilities or Giftedness?". This theory concludes that people with HAG behavior possess three well-defined traits: (1) above-average ability, either generally or in a specific area; (2) task commitment; and (3) creativity, as shown in Figure 3. It is identified that the excerpts "high creativity", "carrying out tasks of interest", and "great involvement in learning" present in the 2008 PNEEIEP are practically descriptions of the traits of Renzulli's Three-Ring Theory. Renzulli (2018) also works with the Schoolwide Enrichment Model, which subdivides enrichment possibilities for all students in the school into three types, as shown in Figure 3:

Figure 3: The Three-Ring Theory and the Schoolwide Enrichment Model



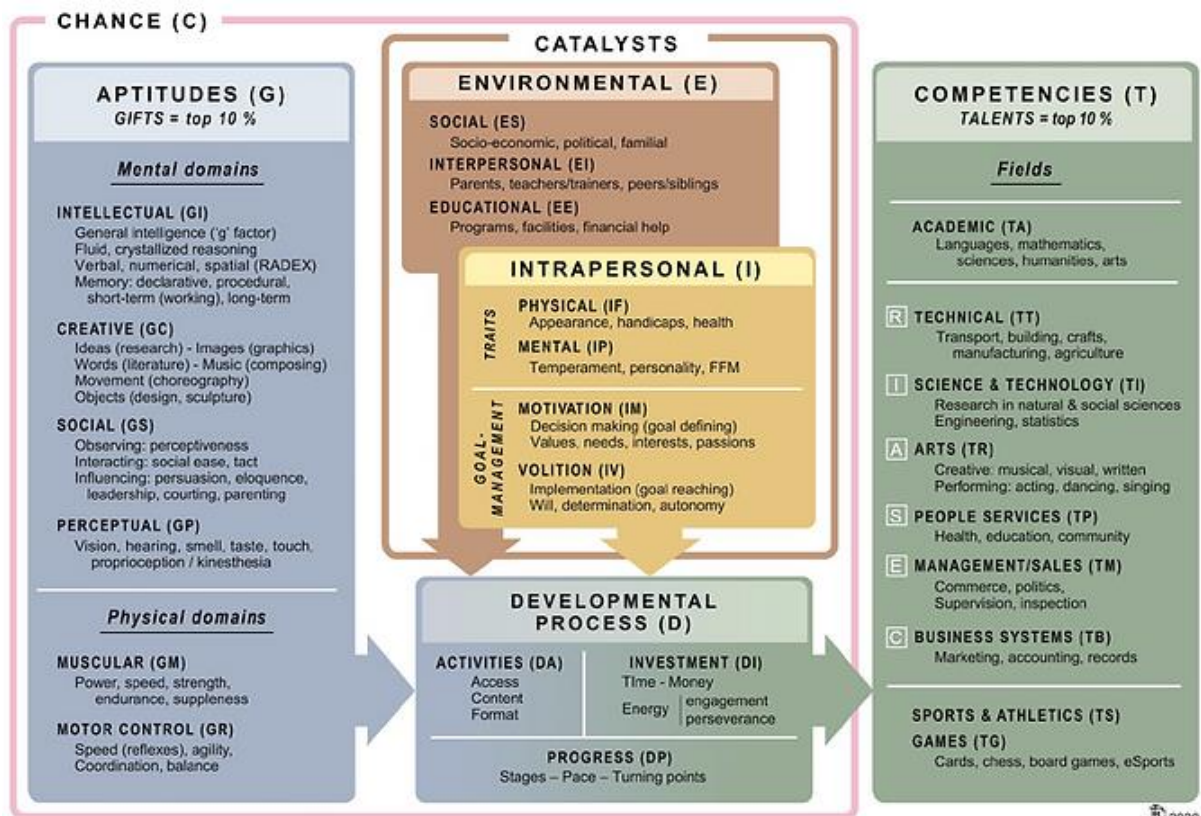
Source: Renzulli, 2018; Adapted from Virgolim, 2019, p. 115.

Regarding the social and affective aspects of HAG students, Virgolim (2019) points out possible sources of stress for the HAG population: (a) advanced cognitive functioning; (b) tendency to relate to older people; (c) early linguistic competence; (d) early onset of developmental stages; (e) rapid progress through developmental stages; and (f) awareness of being different. The author signals the main possible affective characteristics in HAG people: (1) Perfectionism; (2) Perceptiveness; (3) Internal locus of control; (4) Introversion; (5) Divergent thinking; and (6) Sense of destiny. However, it is emphasized that HAG people form a heterogeneous group, with different interests, motivation levels, and educational needs. It is worth noting the issue of multipotentiality, i.e., that HAG people may excel in one or more areas of knowledge, even combining them (Virgolim, 2019).

Regarding the rights of HAG students, the following stand out: (a) Specialized Educational Service (SES) (LDBNE, Art. 4º, Inciso III); (b) Individualized Educational Plan (IEP) (CNE/CEB Resolution No. 4, of 2009, Art. 9º); (c) Curricular enrichment (CNE/CEB Resolution No. 4, of 2009, Art. 7º); (d) National Registry of HAG students (LDBNE, Art. 59 A – Sole Paragraph); (e) SES – supplementation (Decree 7.611, of 2011, Art. 2º, Inciso II); and (f) Acceleration (LDBNE, Art. 59, Inciso II). It is understood that the non-offer of SES and IEP can cause harm to the HAG student, such as inadequacy to the school environment, isolation, bullying, among others.

It is important to highlight François Gagné's Differentiated Model of Giftedness and Talent (2021), represented in Figure 4, which consists of the systematic transformation of aptitudes into competencies, through a talent development process, influenced by environmental and intrapersonal factors.

Figure 4: Differentiated Model of Giftedness and Talent



Source: Gagné, 2021, p. 10

Note that in the center of Figure 4 and below is the talent development process, which involves the transformation of a natural aptitude into a specific developed competence. This process seeks to analyze how access, the type of knowledge, and the format of activities provided for the emergence of talents are constituted, as well as the amount of investment to be used (of time, money, physical and psychological energy) and the amount of progress achieved (in terms of time and advancement, for

example). It is important to bring the main objective of Gagné's model: "to explain all the causal factors that facilitate or block the emergence of talents" (Gagné, 2021, p. 13, our translation). The importance of the model as a learning map is evident, envisioning the possibilities present in each opportunity to be offered to HAG students.

3 METHODOLOGY

The Federal Institutes are composed of 38 rectories and more than 661 units spread across the national territory. These are institutions that are "pluricurricular and specialized in offering professional and technological education (PTE) at all its levels and forms of articulation with other levels and modalities of National Education"¹. The multi-campus structure and the autonomy of the Federal Institutes are highlighted as fundamental for inclusive education connected to local realities and the needs of their population (MEC, 2010).

The research has a qualitative nature, characterized as participant observation, which "consists of the researcher's real participation with the community or group" (Marconi; Lakatos, 2002, p. 90). The choice of this methodology is supported by the inclusion of HAG students, listening attentively to their needs, and the natural participation of the first author as a Mathematics professor at the IF campus where the research was developed.

The research was approved by the Human Ethics Committee under CAEE number: 39987820.3.0000.5349. Semi-structured interviews were conducted during the year 2022 with seven students from the Integrated High School program at a Federal Institute campus in the Southern region, five males and two females, aged between 16 and 19 years old, all with indicators of High Abilities or Giftedness. The ten students on campus with HAG indicators were contacted by email and telephone, of which seven agreed to participate in the interviews, which took place via the Google Meet platform. All interviewees were presented with the Free and Informed Consent Form (for those over 18 and guardians of minors) and the Free and Informed Assent Form (for interviewees under 18), which they agreed to and signed. To preserve the anonymity of the interviewees, they were identified as E1, E2, E3, E4, E5, E6, and E7. The interview base consisted of the following questions:

1. What does it mean to you to be a person with high abilities or giftedness?
2. Which activities and projects are you most interested in carrying out?
3. How did your HAG identification process happen?
4. How do you feel about the HAG identification? (point out positive and negative aspects).
5. What do you think the teaching staff can do to improve support for students with high abilities or giftedness on campus? Would you participate in projects of your interest in the area of Science and Mathematics?
6. Comments, doubts, and/or suggestions on the topic:

1 <http://portal.mec.gov.br/rede-federal-inicial/instituicoes>

In this article, the discussion is organized around the interviews through interpretative descriptive analysis, inspired by Rosenthal (2014). This methodology seeks to understand social reality through the interpretations of the involved individuals' statements. It is also based on the fact that social reality is not an objective phenomenon, but a construction based on relationships and interactions between individuals. It can be said that among the main characteristics of this type of analysis are the focus on the interpretations of the involved individuals' statements and the context as an important element for understanding social reality. Therefore, the use of interpretative descriptive analysis seeks to understand social reality from the perspective of the involved individuals, identify the meanings people attribute to social reality, and understand social reality in its specific context (Rosenthal, 2014).

4 RESULTS AND DISCUSSION

Semi-structured interviews were conducted during the year 2022 with seven students from the Integrated High School program at a Federal Institute campus in the Southern region, five males and two females, aged between 16 and 19 years old, all with indicators of High Abilities or Giftedness. To preserve the anonymity of the interviewed students, they were identified as E1, E2, E3, E4, E5, E6, and E7.

From this context, some answers to the question "what it means to be a HAG person" stand out

I think a person with high abilities or giftedness is a person who has a greater ease of learning and application [...] than others, so they can learn a little faster (E1).

Hmm, I think it's a person who has a, how can I say, greater ease (E5).

I believe it's someone who [...] maybe [...] has an ease of learning (E7)

The understandings brought by these students align with the definition brought by CNE/CEB Resolution No. 2, of 2001, which includes the components *learning ease* and *speed* in understanding *concepts, procedures, and attitudes*. However, although such characteristics are generally present in HAG students, this population is quite heterogeneous, and there may be HAG people who do not necessarily present these traits as marked components of their identity.

There is a strong presence of the conception of intelligence as a multiple construct, in various areas of human knowledge:

So there are people who go towards mathematics, even people who go towards arts, people who go towards physical education. For example, saying that Neymar is a person with abilities, right? I don't see it as absurd that kinesthetic intelligence there is very well developed (E1).

There are several characteristics, right? Several, several types of intelligence and it's as if one of these characteristics of yours was highlighted, either individually or collectively (E3).

I think a more open mind, a broader vision about school matters, or sometimes not even school matters, about some specific subject (E5).

A creative ease, depending on your specific ability, right? Of the types... I believe it's someone who is willing mainly to communicate with people, to understand people, and to help people with what they need. For example, My ability is high in the logical-mathematical area (E7).

The concept brought by students E1, E3, E5, and E7 closely resembles Gardner's Theory of Multiple Intelligences (1995). Furthermore, these understandings are in line with the definitions brought by the PNEEIEP (Brasil, 2008) and CNE/CEB Resolution No. 4, of 2009, when mentioning potential in different areas, isolated or combined.

E2 and E4 indicate aspects related to the feeling of inclusion/exclusion for being HAG students.

Currently, from here, I remember that around the end of my ninth grade, I was sent to see if I had high abilities, so I... I had this reinforcement that I went there every week... I went, I went there to the SES to do some little tests and remember and work a bit on that too, to get to know myself better, but I ended up forgetting about that a bit more recently because it's not very remembered at the IF (E2).

I feel that this, in a way, is something that sometimes made me feel a bit displaced in some places or when I am with some people... (E4).

E2 makes us reflect on the need for initial welcoming of these students and on the essential need to offer ongoing training for Education professionals in the area of High Abilities, so that these students are not made invisible and their potentials are properly supported, as well as their weaknesses properly addressed. In E4's speech, there is a certain shame in being who they are, and a certain introversion due to not feeling comfortable with the exposure with which their potentials were being approached.

Regarding the questioning about interests and activities, these are quite diverse, as can be seen below:

So theater is something I really like. That's where I got quite involved. [...] Yeah, I'm really interested in [...] literature. [...] Yeah, I really like grammar. I think it's a very interesting subject. [...] Music also interests me a lot (E1).

I've always had an interest in some parts of the sciences, for example, chemistry [...] (E2).

For me, it's more regarding philosophy, an area I really like [...] (E3).

I really like music. I play the violin. So I think it would be interesting to have this space, you know, for us to talk about it, meet other people, right? [...] I really like writing stories (E4).

I'm very interested in research, hmm? Field research right now, at the moment I'm very excited about my final project (TCC). Which is the opposite of most of the class (E6).

Look, right now I'm kind of focusing on the UFRGS entrance exam because, precisely, in the statistics tutoring, I developed such a great passion for statistics, right? [...] And now I'm wanting to study statistics in college to be able to teach (E7).

It is understood that it is necessary to observe the interests of HAG students. Working on activities of their interest boosts not only the cognitive growth of these students, but also their emotional, professional development, among so many other components of their lives (Renzulli, 2018). By recognizing the goals and interests of the students, one defines which talent development processes are necessary to take students from their natural aptitudes to the established goals, thus reaching a level of competence (Gagné, 2021). Such a process presupposes skills that will be systematically developed, which requires prior planning of time and resources, for example.

Regarding the HAG identification processes, the students pointed out different situations, as shown below:

The school librarian, I had a lot of contact with her [...] And she identified that I possibly had it, and she brought it to the Guidance and Direction, but she wasn't heard. And then, after 4 years of her insisting, Guidance called me to take a test at the age of 10, and I was referred to the resource room for specialized educational support to be observed. [...] So I stayed, I think [...] 6 months under observation. When it was confirmed, I attended the resource room from 2012 to 2017 (E1).

This process was still in elementary school, right? Because, I had a friend who was writing a story and I helped him. [...] And then my Portuguese language teacher, she noticed that we had this interest. And she referred us to the resource room. The Specialized Educational Support room, which was the SES, that we had in our elementary school. And there in the resource room, we started having that support and encouragement to develop these skills that we had [...] (E3).

In my case, it was when my mother started teaching me to read from a very young age, right? And I ended up having [...] I ended up realizing, wow, she taught me to read now, so I learned to read. Actually learning. The teacher taught me that, I don't know, 4×0 is zero, so it will always be zero. That will never change. So, in my head I had this thought. You know? I grasped something, then I grasped it, and that was it. So I started noticing these things in class itself. [...] When the teacher

started noticing these things, it was then that she placed me there [in the SES] to see what that was about (E4).

And I think it was because of that, the teachers always saw my effort, my performance, and dedication, and ended up perhaps suspecting some high ability, some giftedness in some specific branch, and ended up referring me to the resource room (E5).

So ... it was in the fourth grade. I stayed, I believe, until the seventh grade in this project, right? And it was through my teacher [...] And then they talked to the teachers and then she talked to me, talked to my parents, and I was invited to join. I was class leader, so I ended up getting a bit more involved with the class, anyway. I believe she must have seen a differential (E6).

The importance of regular classroom teachers knowing indicators of High Abilities or Giftedness is emphasized here, considering that the main contact students have is precisely with these professionals. Among possibilities of lists of indicators in the HAG area, we recommend the manual by Pérez and Freitas (2016), the base list of indicators by Delou (1987; 2001), and the Screening of Indicators of High Abilities/Giftedness by Nakano (2021). It is inferred that the main characteristic used in the identification of these students is observation, followed by evaluations carried out by the municipality's SES, in a perspective based on Renzulli's revolving door model.

It is interesting to observe the case of E7 as it represents one of the great difficulties in the area of High Abilities or Giftedness: acceleration in the early years of Elementary School, more specifically in the first year. Although provided for in the Law of Directives and Bases of National Education - LDBNE (Brasil, 1996) in its article 59, inciso II, the practice of acceleration is often not well received by the school team, either due to the difficulty of implementing this practice in terms of academic records, the lack of properly trained personnel to carry out a substantial analysis of this procedure, or also due to the complexity of evaluating all the necessary components for a conclusive opinion.

I already entered pre-school knowing how to read and write. [...] So then they started a process for me to advance a grade. So, in 2011, I attended the first year of elementary school until August. And from August onwards, the second year of elementary school, right? (E7).

It is reinforced that acceleration at any cost is not defended here, but a careful analysis of the cognitive, social, and emotional aspects of the students, aiming for the best possible resolution in each case. It is expected that students will be evaluated by a multidisciplinary team before, during, and after the acceleration process, if this is the best choice.

Still regarding the HAG identification process, E4's account of their trajectory is impactful:

When the teacher started noticing these things [ease and patterns in the learning process], it was then that she placed me there [in the SES] to see what it was... not to notice, so much so that she offered me a test to take to go to the fourth grade, right? From third to fourth grade. So I noticed these changes both at school and in myself [...] but one thing that [...] I was very upset about is that, in the fifth grade, I stopped going there, stopped having that support, you know? I stopped exercising it. So, in a way, I feel that today [...] it's as if it's here [...] if I still have it, it's normal for it to be [covered up [...]] but I was very upset [about] not having continued with it, because when I started being old enough to understand what it was, it stopped, right, [when] I went to the sixth grade. [...] and the reason for feeling that this is covered up is [...] also because I grew up with people calling me stingy [...] but it was also part of me having this covered up because I didn't want to feel distant that way anymore, the way people made me feel distant that way [...] (E4)

This is the portrait of what happens when there is a lack of planning in the identification and support of HAG students. Although the specialized individual planning (incise I of article 59 of the LDBNE) and the SES (paragraphs one and three of article 58 of the LDBNE) are provided for in legal documents, in practice many institutions still do not know the topic of HAG or know it superficially. The invisibility or stereotypes and myths that the area carries (Pérez, 2012) end up making the work of institutions with this public even more difficult. It is worth noting that the IEP does not only plan for cognitive aspects and potentialities but must work on other aspects such as social and emotional, in addition to providing due support for other needs the student may present, such as asynchronies, introversion, among others. Omitting this work is to be complicit in the bullying these students suffer and the consequences that may occur. In continuation, the lack of pedagogical and teaching intervention ends up producing the chameleon effect in HAG students, especially in girls. That is, to avoid continuing to feel different from the people around them and being a victim of bullying, the HAG person ends up behaving similarly to others. Thus, both the cognitive and behavioral spheres are harmed.

Regarding the positive points of identification mentioned in the interviews, only E1, E2, and E4 reported aspects in this sense:

I think the point, one of the positive points is the simple fact of us being able to name it. [...] knowing that this is part of who I am and that there is an explanation for it ... and that, you know, I am not [...] abnormal, I am not crazy or I am not [...] antisocial. It helps, it comforts knowing that I belong to a group (E1).

[...] I only felt positive things about it. [...] It's cool to feel that I have something [...] different, something special [...] I have this as proof that I have this ability (E2).

I think a positive point of this is precisely the characteristic of being able to retain this knowledge and turn it into other things. During the pandemic [...] I needed [...] to give tutoring classes, so I started giving tutoring classes here at home, right? And that also helped me. So this thing of being able to retain knowledge [...] made it much easier for me (E4).

According to Virgolim (2019), one of the main sources of stress in HAG students is when they lack awareness of their difference. Identifying a HAG student does not mean nor should it be a label, but the recognition that there is a neurodivergent person who thinks, reasons, executes, plans, and evaluates differently from others. When this self-recognition occurs, the source of stress is reduced, which results in a positive point, as per E1's statement, as they feel they belong to a group of people. Regarding E4's speech and in light of Gagné's Differentiated Model of Giftedness and Talent (2021), it is observed that the student uses their natural aptitudes and an environment of necessity to, through a development process of their ease, availability of time and energy, arrive at a paid professional activity.

Regarding the negative points of identification mentioned in the interviews, the students indicated that:

[...] because you are generally displaced. Yeah, in most cases, not all, but you get a bit displaced. And you are very labeled. So, either the person is, I don't know, very creative, very restless, so they are labeled as being a troublesome person, right? Or they are much quieter, more to themselves, and they are labeled as what? As a nerd and stuff, that's not very cool. And sometimes, you don't want to talk about subjects that are of interest to people in your circle contributes to you isolating yourself (E1).

It would be what I had mentioned about ending up feeling a bit displaced, so the negative aspects would be that, not feeling very belonging to some place (E4).

After elementary school ended, I never went back to developing myself in these areas like that [...] (E3).

The teacher even told me she would continue the referral here at the IF, and I got really anxious and we waited, I speak for myself and for E3 [...] this invitation to participate in the resource room, but we were never invited to participate in any project or any support there on campus (E5).

It's been a long time, I don't have anything of the sort, any meeting, anything like that, you understand? Because actually, the last time I [...] went to any of these high abilities meetings was in [...] 2017 (E7).

There are several possible reasons for HAG students to feel displaced and/or isolated, which is a source of stress for both these students and the school. One of these reasons, according to Virgolim (2019), can be advanced cognitive functioning,

which means these students are not interested in the subjects of their classmates. Another possible factor associated with the first reason is the tendency of these students to relate to older people, precisely due to the maturity they possess, which on one hand is positive because they find their peers for exchange, but on the other is negative because early exposure to the adult world can make them more stressed (Virgolim, 2019). Yet a third possibility is that these students are introverted, which makes them need privacy and fear being humiliated, preferring to stay quiet in large groups (Silverman, 1993; Virgolim, 2019).

Regarding the lack of specialized educational support in HAG or the lack of continuity of activities aimed at the HAG public at this IF campus, there is a certain lack of professionalization of the management and teaching teams regarding the topic. This is a gap that this article seeks to address through ongoing training based on the perceptions and aspirations of this school community, namely: managers, mathematics teachers, and HAG students, from the perspective of Imbernón (2010). Furthermore, it is necessary to expand the number of SES teachers on the campus in question, considering that the first and only permanent professional on campus only started in 2022.

Regarding the question about improvements in support for HAG students on campus, the students reflected that:

Yeah, and another thing is the Federal Institute, which is something the Federal Institute already does, but it could encourage more and make it more explicit: support the students in projects they are interested in doing (E1).

But if there were, for example, a science workshop [...] up until today I heard about having a workshop, for example, chemistry on campus, [...] getting some people together in the lab, doing some experiment. Like, I think that would be a very cool thing to do (E2).

Regarding projects and everything, I think maybe that ... I don't mean attention, because I know there is, right? Since the teacher came, called me, asked if I was E4 and all, so I think it would be more or less that ... I don't know, the word escapes me now, but this attention, this thing of, you know, this initiative, I know it exists, but I think that's basically it (E4).

I believe there should be some teaching projects, some things of the sort that identified other students who perhaps haven't been identified in elementary school either by the school or because they didn't show it. So, new people. And also bring together the old ones again, right? (E7).

Offering projects and/or workshops in areas of interest to HAG students is an action covered by the theories of Renzulli (2018) and Gagné (2021). From Renzulli's perspective, offering activities that are of interest to the HAG student promotes task commitment, as one of the links in the Three-Ring Theory. Projects and workshops are possibilities within a broader spectrum of curricular enrichment. Renzulli (2018) points

out three types: Type I is responsible for providing opportunities for contact with the most diverse fields and experiences of human knowledge; Type II is considered for training and deepening cognitive, social, and research techniques, for example; and Type III addresses real-world issues and problems that either do not yet have answers or have multiple approaches.

On the other hand, Gagné's theory (2021) leads us to think and plan about how to transform the aptitudes (natural abilities) of these HAG students into competencies (systematically developed abilities). To do so, it is necessary that these students go through a development process, in which they are guaranteed: (1) a set of activities, which includes the young person's access to a program of activities leading to a specific objective, objects of knowledge to be worked on in this program, and what type of learning environment will be used (school, sports center, structured, self-taught, etc.); (2) the proper investment, thought of here as a quantifier of time; this means measuring how much time, money, and physical and psychological energy the student will demand in the talent development process; and (3) the proper progress, thought of here as measuring the student's performance advancement, from an initial stage to a maximum stage (e.g., novice, advanced, proficient, and expert); it also means measuring the pace of progress towards their stipulated goal.

Regarding how teachers can improve support for HAG students on campus, E1, E3, E5, and E6 point out aspects related to the identification and/or screening of High Abilities or Giftedness. According to E1, E3, E5, and E6:

So, the Federal Institute should seek out these students, and not just wait for students to take the initiative to do so because perhaps that person is not aware of how pleasurable it will be for them. So, the teaching team should identify that these people could, would do very well in a certain layer of knowledge and encourage these people to take part in projects, to do work, eh... (E1).

But I think it starts with identification, because... There are many cases of students at the IF who could be supported by the resource room and have high abilities. They have abilities that could be further developed. But it ends up that there is no space for this, so I think the teacher has the initial task of identifying people with high abilities and encouraging them to give some follow-up, to develop their abilities further (E3).

So I think there could be [a referral made by teachers]. I know it's very difficult... all teachers on campus have many classes and many students to remember, but there's always that one that you see has something different. So I think this referral, this conversation with that specific resource room teacher, through the classroom teacher, could happen more clearly, but it's evident, because I feel and see that on campus there are many people and many good people, you know? (E5).

I was going to mention something else: my teacher [from the elementary school SES], she gave a test at the beginning, it was like a vocational test about the area you actually belong to. [...] Then she separated us into groups like that. I believe that improves things (E6).

Indeed, identifying HAG students can bring several benefits: from appropriate educational support for their needs to the promotion of balanced intellectual, social, and emotional development. Furthermore, mapping interests and learning styles from the perspective of Gardner's Multiple Intelligences helps optimize the learning potential of HAG students. In practical classroom aspects, identification and appropriate curricular adjustment can prevent issues related to boredom or lack of interest in certain subjects.

E1 reflects forcefully on the importance of teachers having good training in the area:

The first thing is to provide good training so that the teaching team has great clarity about what it is. [...] It's about demystifying the subject a lot. Second, is that the Federal Institute must have a special view of classroom dynamics for these people. Because, for example, I've had moments when I was so bored in a class that I became short of breath. I had to leave, ask to go to the bathroom, and ask for one, because it was very complicated, what was very tedious, [...] So [...] it's [...] making the subject converge with that person's interest, because, speaking from personal experience, dealing with subjects that are not of my interest causes a lot of suffering. [...] Another thing that would be interesting is not turning this into something mystical, mythologized. [...] I would suggest conversations with students of the institution about what this is, how it works. [...] People knowing about its existence [...] is giving them this awareness... so that people can identify themselves. Because, yeah, I recognize myself in this symptom (E1).

The ongoing training that is designed and built precisely through the perceptions and aspirations of these students intends to qualify not only the teaching team but also the management team. The choice of Imbernón (2010) as the theoretical support for this training occurs precisely because we understand that many training sessions take on a very transmissive and not very interactive character, not promoting the necessary change in institutions. Thus, starting from the interviews with students aims for work that becomes more meaningful and functional, bringing the necessary knowledge for working with HAG students, thus mitigating the invisibility, myths, and stereotypes so ingrained in this area of study, according to the studies of Pérez (2012). It is necessary to make the topic of High Abilities or Giftedness more human and less heroic, considering that work inspired by the interests and learning styles of these students benefits not only themselves but also the school and all other students as a whole. As Renzulli (1998, p.105) would say, "a rising tide lifts all ships".

It is worth indicating that on the topic of High Abilities or Giftedness, students point out the importance of working on belonging.

Make it clear that it's normal, that it's not a problem at all, and that the person is not, in fact, as disconnected as they think they are, because they are still part of a group of people who are diverse and that

peculiarity is theirs, but they are not the only one with a peculiarity [...] (E1).

Perhaps give more attention [...] to not letting people forget that they have (HAG), that they are part of this group and that they can think differently from other people, that's not necessarily a bad thing (E2).

I found it very interesting, because this (interview) ... you calling me that day to talk, me reading (the free and informed consent form), me thinking, me talking to my psychologist about it, made me go back to feeling that I have an identity and feel proud of it. And feel that it doesn't make me a bad different, it makes me a good different. And that I always belonged to a place. And that having this, I can belong anywhere. This feeling I have, I can, if I want to, I can, I go after it, I persist, and that made me feel better. It made this subject return. This subject that had, you know? Been closed for so long came back now, and that makes me... That makes me happy, that (E4).

I think that support for people with high abilities needs to be designed to be broader and serve all types of intelligence and giftedness that people may have, right? And not be something restricted to some more specific segments (E3).

It is important to reflect on how the feeling of belonging is mentioned and how not working with these students can promote exclusion processes. In this sense, working on belonging begins with: (1) enriching learning experiences, whether through Renzulli's Schoolwide Enrichment Model, Gagné's Differentiated Model of Giftedness and Talent, or differentiated methodologies in the classroom; (2) offering social and emotional support, aiming to better work with issues inherent to certain HAG people such as perfectionism and social alienation (Virgolim, 2019). By starting with these two aspects, we seek to promote the valorization and inclusion of HAG students in the school community, increasingly producing an inclusive and healthy learning environment. Finally, E3 reminds us that HAG should be worked on in the most diverse areas, as advocated by Gardner's Theory of Multiple Intelligences (1995). Providing different paths is a fundamental condition to guarantee all students of the Federal Institute the words of its slogan: "a public, free, and quality education".

5 FINAL CONSIDERATIONS

This article sought to analyze and reflect on the perceptions and aspirations of seven students with High Abilities or Giftedness in the Integrated High School program at a Federal Institute campus, in order to bring important elements to the process of professionalizing this educational space on the topic of HAG. The students' interpretation of being a HAG person brings aspects related to ease and speed of learning in different areas of knowledge, approaching the legal definitions of CNE/CEB Resolution No. 2 of 2001, the PNEEIEP (2008), and CNE/CEB Resolution No. 4 of 2009, as well as Gardner's Theory of Multiple Intelligences. Aspects related to the feeling of not being included in activities or feeling displaced in certain places also

emerged, which partially demonstrates a lack of ideal welcoming by the institution and demands ongoing training so that the teaching and management teams pay close attention to these demands.

Regarding the interests of HAG students, distinct interests are perceived in different areas, such as music, theater, writing, Chemistry, Philosophy, Statistics. The importance of working with the interests of HAG students is highlighted as fundamental, in agreement with Renzulli's Three-Ring Theory. When using the student's interest, the probability of the other two rings of the theory accompanying it increases: task commitment and creativity. From the perspective of Gagné's Differentiated Model of Giftedness and Talent, recognizing students' interests helps in proposing personal goals and objectives to define which necessary talent development processes will be needed for students to move from a natural ability (aptitude) to a systematically developed ability (competence).

Regarding HAG identification processes, the students indicated regular classroom teachers as the first to signal the possibility of their identification as HAG people. There is also an important mention of the Specialized Educational Service during the early years of Elementary School and the lack of continuity of support in the final years of the same stage, resulting in various actions such as bullying and feelings of not belonging. These results demonstrate the importance of regular teachers having adequate training to screen for High Abilities or Giftedness, as well as recognizing when the acceleration process is necessary for these students. A careful look from the teaching and management teams is necessary to realize the rights of HAG students, such as the Specialized Educational Service (SES), the Individualized Educational Plan (IEP), curricular enrichment, inclusion in the National Registry of HAG students, and the acceleration process, when applicable.

Regarding the feelings of HAG students concerning their identification, there are reflections on positive aspects such as the importance of the identity component, the feeling of being special for being HAG, and the ease of learning. There are also negative points, such as feeling displaced or isolated from the group and the absence of experience or continuity of specialized educational support in HAG. The importance of the teaching and management team's knowledge of the social and affective aspects of the HAG population is emphasized here so that necessary actions can be taken. Thus, it is essential that the ongoing training planned with these perceptions and aspirations takes into account the possibilities of curricular enrichment, whether through Renzulli's Schoolwide Enrichment Model or through Gagné's Differentiated Model of Giftedness and Talent.

The need to expand the number of Specialized Educational Service (SES) teachers on this campus is also emphasized. In a campus with approximately 1500 students and around 100 students who are the target audience of Special Education, only one permanent SES teaching professional cannot handle the demands necessary for the effective inclusion of HAG students.

Regarding actions that could be taken by teachers to improve support for HAG students at the Federal Institute campus under analysis, the students indicate the offer of projects and/or workshops according to their interests, in addition to suggesting that teachers receive training in the area of High Abilities or Giftedness, emphasizing the

necessary demystification of what HAG is and the urgency of a change in classroom work dynamics.

The students also signal the importance of working on belonging and indicate the need to value all areas of intelligence, not just certain domains. It is understood that the feeling of not belonging can promote exclusion processes, leading us to reflect on the importance of working on the welcoming and belonging of HAG students. In this sense, working on welcoming and belonging involves processes such as: enriching learning experiences and offering social and emotional support. Starting with these two aspects, we seek to promote the valorization and inclusion of HAG students in the school environment, towards an increasingly healthy learning environment. Finally, it is observed that HAG can be worked on in the most diverse areas. It is emphasized that providing different paths is a fundamental condition to guarantee, not only to HAG students but to all students of the analyzed Federal Institute campus, the words of its slogan: "a public, free, and quality education".

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