

HIGHLY ABLE MATHEMATICS LEARNERS FROM A PRAGMATIC PERSPECTIVE OF LANGUAGE

Karin Ritter Jelinek
karinjelinek@furg.br

Universidade Federal do Rio Grande – FURG

Samuel Edmundo Lopez Bello
samuel.bello@ufrgs.br

Universidade Federal do Rio Grande do Sul – UFRGS

ABSTRACT

This paper presents part of a post-structuralist research that aimed to analyze language games in forms of life of children regarded as high ability learners, thus evidencing the games that have been valued in school processes of selection and education enhancement. The work here presented was developed with the use of ethnography-inspired techniques involving three students from the Municipal Education Network of Porto Alegre (Brazil), their regular teachers and their SIR/AH teacher. Through the approximation between Wittgenstein's notion of language games and Foucault's notion of games of truth, it was possible to notice that in the core of these games there are rules of legitimation of discourses forged in power relations established among subjects in historical and social settings. With the approximation of these ideas, the expression *power-language game* was coined to support the discussions proposed in this study. It was concluded that high ability subjects are an effect of a discursive practice, since the ways of being and acting give them existence. It was also possible to notice that the identification and selection of these subjects occur mainly through comparative and classificatory processes.

Keywords: high abilities; power-language games; school practices; subjectivity; conducts.

RESUMO

O presente artigo apresenta o recorte de uma pesquisa de cunho pós-estruturalista que teve por objetivo analisar os jogos de linguagem em formas de vida de crianças ditas portadoras de altas habilidades, evidenciando aqueles valorizados pelos processos escolares de seleção e enriquecimento educativo. O trabalho apresentado neste artigo foi desenvolvido a partir de técnicas de inspiração etnográficas, envolvendo três alunos da Rede Municipal de Ensino de Porto Alegre (Brasil), suas professoras do ensino regular, bem como, a professora da SIR/AH. Aproximando a noção de jogos de linguagem de Wittgenstein, da noção de jogos de verdade de Foucault, foi possível perceber que no âmago desses jogos encontram-se regras de legitimação de discursos forjados nas relações de poder mantidas entre os sujeitos no espaço histórico e social. No exercício

de aproximação dessas ideias cunhou-se a expressão jogos de poder-linguagem, a qual passa a sustentar as discussões propostas neste estudo. Conclui-se que o sujeito das altas habilidades é efeito de uma prática discursiva, uma vez que são os modos de ser e de agir que lhe outorgam existência. Também foi possível perceber que a identificação e seleção desses sujeitos dão-se, acima de tudo, por processos comparativos e classificatórios.

Palavras-chave: altas habilidades; jogos de poder-linguagem; práticas escolares; subjetividade; condutas.

1. Initial Remarks

The content of this paper is part of a post-structuralist research that aims at analyzing language games in forms of life of children regarded as highly able mathematics students¹, evidencing the games that have been valued by school processes of selection and educational enhancement. In order to carry out this research, we used Wittgensteinian theoretical tools – language games and forms of life – as well as Foucauldian tools – discourse, power relations and governmentality –, with which the notion of power-language games was created and then used in the analyses proposed in this paper. From an analytical-descriptive movement with a focus on language, this study aimed at understanding the way that discourses of high abilities spread in schools of the Municipal Education Network in Porto Alegre (Brazil) have identified, compared and ranked high ability subjects. We observed the activities of selection² and educational enhancement proposed by the teacher in charge of the Room of Integration and Resources for High Ability/Gifted Students (SIR/AH)³ and interviewed three students “considered” as mathematically gifted learners and their regular teachers.

It should be mentioned that the research of which this work has stemmed was organized in two complementary stages. By intertwining both, we proposed to address high abilities in mathematics from a macro perspective, related to the society’s way of thinking, to a micro perspective, related to classroom and school issues.

The analytical moves initially enabled us to see a reactualization and displacements of the meaning of high abilities in mathematics from a scientific-cognitive comprehension to a behavioral point of view in relation to social and economic conditions. It was also

¹ Post-structuralism is here understood as a movement of thought distanced from structuralism, and it enabled us to problematize discursive productions. Such movement has not only reformulated traditional understandings of linguistic and discursive processes, but also questioned the assumptions of structuralism, phenomenology, dialectics and metaphysics by problematizing the rigidity, fixedness and essentiality of significations.

² The process of selection of high ability learners by SIR/AH consisted of filling out both the *Form of Self-Appointment and Appointment by Classmates* by the students, the *Form of Classroom Observation Items*, by the teachers, and interviews performed by the SIR teacher.

³ According to the Brazilian Ministry of Education (MEC), this classroom does not differ from the others in its physical characteristics, except for the availability of resources such as: computer, tape-recorder, slide and movie projector, DVD-player, science lab, games, etc. It is a special place to perform specific activities that enhance the ability learning-teaching process (BRASIL, MEC/SEE, 1995, p.55). Decree nr 6.571/2008 allows the education networks to invest in teacher continued education, user-friendly school space and furniture, and acquisition of new resources of assistive technology, among other actions involved in teaching maintenance and development for the organization and offer of Specialized Educational Assistance (SEA) in multifunctional resource rooms. Porto Alegre has one SIR/AH.

possible to notice that the so-called high ability subject is not produced through a simple name change, but through attentive and judicious observation by the school agents. Such observations are also based on comparative performance criteria, particularly the ones valued by the school (JELINEK, 2013a, 2013b)⁴.

At the second stage of the investigation, which is detailed in this paper, we discussed, based on our field work, how the *power-language games* mobilized by the school both value and highlight certain types of conduct by evidencing those that, we believe, will constitute the highly able mathematics subject in the school. For the development of this second stage, we adopted the methodological principles detailed below.

2. The theoretical-methodological principles of this investigation

The study of forms of life required an ethnographic approach to our investigation, although we were starting from a post-structural view. Considering that subjects both form and are formed by discursive practices, it was crucial to design adequate methodological procedures and keep distance from classical ethnographies, as their methodological assumptions support the belief in the researcher's neutrality. In this way, distance from the possibility of just narrating the other's experience, and articulation of different research techniques – such as observation, autobiographic report and record production – became pertinent.

Sarmiento (2003, p.159) argued that in contemporaneity an investigation “cannot ignore the impossibility – and undesirability – of researcher's aseptic, allegedly innocent postures in the research field”. According to Geertz (2001, p. 66), we should not forget that “we see the others' lives through the lenses we have polished and that the others see us through theirs”. Considering such premise, we believe that researcher's neutrality in the field is not possible.

Caldeira (1988) claimed that a post-modern ethnographical study not only changes the researcher's role, but also its reader's, who is invited to assign meaning to the discussions together with the author. A research from this perspective “may evoke, suggest, provoke, mock, but not describe cultures”. Caldeira explains that, in this way, we become distant from classical ethnography, because

The authors do not hide themselves to affirm their scientific authority; rather, they show themselves to disperse their authority; they do not analyze, they just suggest and provoke. Then the readers' conception changes radically: they are no longer the ones that are informed, but now they must be active participants in the construction of the meaning of the text, which only suggests meaning connections (1988, p. 142 – 143).

⁴ This research intended to address high abilities in mathematics from a school logic in which Mathematics is a school subject, and high abilities in mathematics are necessary conditions for a person to succeed both in life and school. As the studies were developed, it was possible to understand that issues related to high abilities are discursive and that this disciplinary feature is just illusory or just an institutional strategy of the school field. By situating the high ability practices in relation to the production of conducts and, ultimately, of subjects, we understood that there was no point in using the mathematics lens to look at high ability practices; rather, it was necessary to look at the conducts as a whole and the kind of subject that one wants to produce, and this goes beyond the disciplinary sphere. This discussion is detailed in Jelinek (2013).

Our study was grounded on the post-modern ethnographic view, which favors a multiplicity of meanings obtained from the analyses. The analyses are not intended to be the truth of either forms of life of high ability subjects or power-language relationships. They are a possibility among many others. According to Ferreira,

There is no longer a universal, transcendental view, but a personal view in which the ethnographers assume the specificity of their authorship and “the place from where they talk”, making room for other subjects’ voices that are present in post-modern narratives and ethnographic studies, besides other voices that act as mediators of the subjects’ and researcher’s voices: the media, political and economical contexts, cultural artifacts and practices, discourses, languages, among others (2004, p. 49).

An ethnographic study is, above all, a study of the individuals’ form of life. It is centered on the rules of a given community. As Sarmiento (2003, p. 152) stated, “it is not a matter of method that distinguishes ethnography from other kinds of investigation, but its perspective, focus or orientation”. Consequently, it is possible to say that the assumption of an ethnographic study like this is the orientation of the investigative view towards meanings, rules and language games that are part of a community.

In this study, we used such technique because it allowed us to *know* the individuals’ practices in localized spatial-temporal spheres and evidence similarities between the language games present in those practices and the ones involved in the activities of selection of high ability subjects. In this field work, we intended to participate in SIR/AH routines by being there, observing, talking and perceiving what was said and unsaid. We attempted to understand the meanings assigned to the processes of selection and educational enhancement, as well as the relationships that might exist in the language games. We also intended to consider the understanding that different participants in that space had of their involvement with SIR/AH, in an attempt to bring this multiplicity of voices to the Field Journal.

Among the techniques that composed the ethnographic work, besides observation, we used interviews and a Field Journal to support the discussions proposed in this paper.

3. When language is intertwined with power

For the theoretical basis of this study, we sought to approximate Ludwig Wittgenstein’s and Michel Foucault’s ideas in order to accomplish the goal of this research, i.e. to analyze the language games in forms of life of children taken as high ability learners, thus evidencing the games that are valued by the school processes of selection and educational enhancement.

We thought it would be possible to approximate the theoretical tools of those philosophers because both of them were distant from a metaphysical perspective of language and knowledge. In Wittgenstein, language never achieves either a representation or an expression of the real; in Foucault, truths are not revealed by reason; rather, they are *invented* by it. These philosophers’ ideas helped us discuss how, from a given historical moment, practices⁵ – illusorily naturalized as universal – started

⁵ Regarding those practices, we should bear in mind that we refer to the Foucauldian notion, which regards discursive practices as “a body of anonymous, historical rules, always determined in the time and space that have defined a given period and for a given social, economic, geographical or linguistic area,

being seen as combinations of language games and, through power, had their truth or falseness defined.

If, for Wittgenstein (2008, §7), language games are “the totality composed of language and the activities with which it is intertwined”, thinking about language games in the field of high abilities presupposes thinking about a varied range of signs. These signs, by being articulated by rules of signification, constitute a game of meanings and enable us to perceive and understand the so-called high ability *learners* and the pedagogical situations that surround them.

Foucault (1995, p. 55), in turn, explained that we should not see discourses as “a mere intersection of things and words”. For him, the “discourse is not a thin surface of contact, or confrontation, between a reality and a language, the intrication of a lexicon and an experience”. What allowed us to say that Foucault’s ideas, in a way, go beyond Wittgenstein’s notion of language is that, by analyzing the discourses, “one sees the loosening of the embrace, apparently so tight, of words and things, and the emergence of a group of rules proper to the discursive practice”.

On mentioning that discourses go beyond linguistic facts and also have a strategic level, Foucault commented that we should no longer consider the facts of discourse “just in their linguistic aspect, but, in a way (...) as strategic games of action and reaction, question and answer, domination and evasion, as well as struggle” (2003, p. 9).

In this research, the language games of high abilities were understood as producers of subjects’ conducts, since whatever is thought or said of those subjects ends up constituting a specific form of life. Practices are permeated by knowledges, and such knowledges support the school actions that involve the so-called high abilities.

Thus, we no longer understand language as a means of communication between subjects, but as a game constituting reality itself. Language starts to have the function of producing the one that we regard as a high ability *learner*. Consisting of rules of signification, “through the way that they are used and followed, [language] institutes models and standards, thus producing subjects” (Aurich, 2011, p. 45).

Furthermore, we should consider that language is not private, as it is impossible to follow rules privately. *Following rules* is a *practice* and this *practice* generates signification. Wittgenstein, on exploring the ruled character of the language games, commented on the difference between rule and its enunciation, so that a paradox is established:

This was our paradox: no course of action could be determined by a rule, because every course of action can be made out to accord with the rule. The answer was: if everything can be made out to accord with the rule, then it can also be made out to conflict with it. An so there would be neither accord nor

the conditions of operation of enunciative function” (FOUCAULT, 1995, p. 133). By understanding that practices are constituted by discourses in social and historical spaces, in this study, we decided not to assign adjectives to the concept of practice. Therefore, whenever we refer to practices, one should understand that they are discursive and social. Miguel (2010, p. 39) has highlighted such point by stating that “what Foucault has clearly suggested (...) is that, for a history that believes that practices produce new forms of knowledge and subjectivity, it is impossible to trace a sharp demarcation line between discursive practices and social practices”.

conflict here. (...) What this shows is that there is a way of grasping a rule which is not an interpretation, but which is exhibited in what we call “obeying the rule” and “going against it” (WITTGENSTEIN, 2008, § 201).

Foucault, by discussing about discursive practices and the production of legitimization of truths, started to operate with the concept of *games of truth*, which intertwines with Wittgenstein’s notion of language game, but is not restricted to it. The concept of games of truth comprehends language and subjectivations [subject forms] that derive from these games.

While Wittgenstein used the word ‘game’ to establish an analogy with language, understanding that both are rule-guided activities, Foucault went beyond saying that the word ‘game’ implies production of truth. He explained:

When I say ‘game’, I refer to a set of rules of production of truth. It is not a game in the sense of imitating or representing... it is a set of procedures that conduct to a certain result, which may be considered due to its principles and rules of procedure (...) (2006, p. 282).

Therefore, we can say that a possible encounter between language games and games of truth occurs in the presence of a rule that triggers and supports the game itself. According to Birman,

Stating that there is always a game, either a language game or a game of truth, involves underlining the presence of a **rule** that presides and would constitute the game as such. However, enunciating the existence of a rule is to indicate the existence of something of the order of the **invention** and the **arbitrary**, which would constitute every and any rule (2002, p. 307) [bold emphasis in the original].

We believe the rules that constitute the high ability practices have stemmed from the use that preceded them. As Wittgenstein (2008) put it, the rules are not conceived in offices – in the world of ideas – but on the streets. Starting from the idea that the rules are established through the use the subjects make of them, we can say that the rules come from a social and historical movement.

The rules that involve high ability *learners* are public. They come from collective customs and attitudes that are present in school processes. As a rule is not obeyed just once – in the same way that not only one child is selected as a highly able mathematics *learner* – we can say it results from a continued practice, which causes regularity. It is this regularity that interests us in this study.

This notion of rule is fundamental in our analysis because it supports and gives conditions for the production of the meaning of what we call high ability *learner*. In addition, the strategic character of the rules provides us with direction standards, with models of what to say and do, thus conducting the way we should act.

In the center of these ruled games, we can say that language would be a necessary condition for the production of truth as a game, but it would not be, however, a sufficient condition. In their core, there are rules of legitimation of discourses forged through power relations established among the subjects in the historical and social environment. Foucault’s games of truth keep a relationship with Wittgenstein’s language games that is mediated by games of power.

It is in the dynamics of daily practices that the rules of these games of power can operate, reproduce, dominate and subject individuals. By weighing the importance of the social in the constitution of the games of power, we can understand that a practice is a game that matches language and power.

It matches language because it is a game of significations, and it matches power because it is a game that guides conducts and institutes truths. Therefore, in our discussions, we can call such combination of different games – games of language, games of truth and games of power – *power-language games*.

Power-language games, which institute the practices in the field of high abilities, are constituted of rules that guide the way that the education system must act, pointing out a direction rather than an obligation, and constituting subjects.

Starting from the principle that the social context is not only a scenario, but a constitutive element of our way of thinking, it is from this context that we see the constitution of specific practices. Hence, talking about education is to talk about practice, which, in turn, makes us talk about the subject. The practices have a narrow relationship with the ways of being a subject. The subject *is* in the discourse, which is also inevitably produced by what is said about him or her. Then, while Foucault regards the subjects as products of practices, Wittgenstein considers them as products of their forms of life constituted through games of language and their codes of conduct.

Therefore, according to Wittgenstein, words only obtain a meaning in “the stream of thought and life”. By aggregating to this idea the understanding that “the meaning is indissolubly connected to discourses shared by the community that makes them function” (VEIGA-NETO, 2007, p. 38), it is possible to problematize the practices of selection and educational enhancement directed to highly able mathematics *learners*.

4. High abilities in mathematics as an invention

By using Foucault’s notions, we can say that the discursive practices of high abilities are constituted of rules that provide ways to assign meaning to a certain materiality, thus forming the elements about which they talk and producing truths according to a given historical moment. In this sense, we regard the high ability subject as a discursive production. We should remind that Wittgenstein’s notion of language (2008, §24, §26, §27) explores the existence of languages that mean the things about which they talk considering the uses we make of words, i.e. the meanings appear in accordance with the rules of meaning amidst the practices.

In the games that we could call ‘language games of high abilities’, the words do not represent the high ability *learners*, they are not just names, they are part of human actions – language can be understood as an action, that is, we leave the substantial meanings of the words and replace them with their functional conceptions. What we are trying to explain is that language does something – it produces things and subjects, it creates new comprehensions of them. It is the use of the words that gives life and existence to those individuals and determines their meaning and understanding by the school community.

On being intertwined with power, the practices and the *language-power games* produce the highly able mathematics *learner*, based on needs of use, desires and values; more than that, based on socially established rules. We can also say that both Wittgenstein and Foucault state that concepts and discourses are not constituted of a fixed rational framework; rather, they are byproducts of space-time localized practices.

Considering these formulations, we believe that it is possible to talk about high abilities nowadays because it is this point of view that has enabled us to “bear in mind” and signify that subject (individual) that has been called high ability *learner*. As Wittgenstein (2008, §37) argued, it is in the relationship between the name and what is named that “hearing the name calls before our mind the picture of what is named”. Therefore, only by means of the discourses and language can we “bear in mind something as something” (2008, p. 35).

High ability *learners* would not have a meaning if nothing corresponded to them. In contemporaneity, the subjects known as high ability *learners* have been produced by *language-power games* that mold them and give them a shape. In order to better understand how this occurs, we considered what was said by subjects that took part in this research.

We point out that the speeches on which we based this discussion were not individual manifestations by the research subjects. On the contrary, they were collective speeches, since they were reverberations and obeyed rules situated in space and time, in tune with *language-power games*, regimes of truth and power-knowledge relations from which they have emerged.

The SIR/AH teacher, intending to support and justify the participation of the student Daniel⁶ in the SIR activities, described him as a “*tranquil student that speaks low and slowly, he is affective, polite, very attached to his mother. He is very concerned with his appearance and is always well groomed and combed. He performs the tasks carefully and attentively until completing them and whenever he has some time left, he looks for games and challenges to spend time. He likes having adults’ attention drawn to him*”⁷. The student Thomas was selected because he is a “*restless, impatient student who speaks loud, is playful and affective with people. He gets involved in the tasks, but does not seem to have much fun when they include artistic productions. He does not like challenges and prefers action to planning. He is independent and brave. His mother has always read to him*”. In our view, the selection rules are intertwined with a criterion involving the individuals’ conduct.

This specificity (the conduct) has not emerged only from what is said. If we understand the observation form to be filled out by the teacher as a power-language game, it will become evident that most of the items are also aligned with rules and ways of being and acting that are assessed according to conduct. On the Student Observation Form, we can find expressions such as “lonely, fun, naughty, sensitive to others, persistent, committed, kind”, among others. It is worth saying that, according to the SIR/AH teacher, a student must conform to the specifications of least three of the following items: 2, 9, 11, 18 and/or 22 to be pointed out as a highly able mathematics *learner*.

⁶ This article has kept the subjects’ identities confidential by using fictional names.

⁷ The excerpts from the Field Journal are quoted in italics in order to differentiate them from the rest of the text.

List of items to be observed in class

Date:
School: Group:
Teacher's Name:
Subject:
Telephone Number: E-mail:

Indicate in each item two students (boy or girl) from your group that, in your opinion, show the following characteristics:

- 1) The best students in the areas of language, communication and expression
- 2) The best students in the areas of mathematics and sciences
- 3) The best students in the areas of art and art education
- 4) The best students in extra-curriculum activities
- 5) The most talkative students
- 6) The most curious, interested and questioning students
- 7) The most participative students, who participate in everything, both inside and outside the classroom
- 8) The most critical of the others and themselves
- 9) With better memory, the ones who easily learn and retain information
- 10) The most persistent, committed students, who finish every assignment
- 11) The most independent students, who start working by themselves
- 12) The most bored, and uninterested students, but who are not necessarily slow
- 13) The most original and creative students
- 14) The the kindest and most sensitive to others
- 15) The most concerned with the others' welfare
- 16) The most self-confident students
- 17) The most active, perspicacious, observing students
- 18) The most able to think and draw conclusions
- 19) The nicest and most well-liked by their classmates
- 20) The most lonely and ignored students
- 21) The most naughty and playful students
- 22) The students that you consider as the most intelligent ones
- 23) The students showing the best performance in sports and physical exercises
- 24) The students showing outstanding manual and motor abilities
- 25) The students that present unexpected and pertinent answers
- 26) The students that are able to lead and are the most encouraging
- 27) Is there any other child showing other special talents in your group? Which ones?

How do the last two students show their talent?

Comments that you may find useful

Thank you for your contribution to this research!

Adapted by Suzana G. P. Barrera Pérez from the form used by the Center of Talent Development (CEDET) from Lavras (MG), and extracted from the book *Desenvolver capacidades e talentos: um conceito de inclusão* (GUENTHER, 2000, p. 175-177).

Fig. 1: List of items to be observed in class.

It is interesting to highlight the fact that, 20 out of the 27 items on the list are exclusively based on desirable conducts, while the other items establish a comparison between the individuals that compose the group, as can be identified in the expression “*the best*”.

“Those who have better memory, learn and memorize more easily, are more independent, start working by themselves” are some of the specifications that identify a possible highly able mathematics *learner* and are also related to the individuals' conduct, despite the focus on an exact science.

If we match the characteristics of the two subjects presented in the excerpts with the ones listed in the form, we will see that high abilities in mathematics no longer involve traditional cognitive features. Actually, they are naturalized through expressed conducts. We can also say that the truths on which are laid the foundations of those practices are

nothing less than games assigning some objectivity to the subjectivity of highly able mathematics *learners*.

What we have attempted to explain is that the conducts we can observe in the school practices are manifestations of obedience to the rules of *power-language games* that constitute and are constituted by those practices. Evidences of that were also identified in the interviews performed in the schools during the field work.

When we visited the schools with the objective of reconstructing the processes of selection of students D and T and following an ongoing selection process – student M – we wanted that the teachers pointed out the reasons why the school identified those children as highly able mathematics *learners*.

In one of the schools, a teacher mentioned that, “*in A20 [it corresponds to the 2nd grade of the nine-year elementary school], he already had an excellent vocabulary for his age and also stood out for cohesion of ideas in writing, but the presentation (layout) of his homework has always been disappointing*”. The teacher complemented: “*He always gives interesting contributions to the class [she did not give any precise example of that], becomes bored with repetitive activities and carelessly performs them*”. Still talking about this student, the school supervisor remembered some features related to mathematics and said that “*in A20 he could understand the Decimal Number System and explained to his classmates what number 300 was: it was three times 100, because if 30 is three times 10, then, 300 is three times 100*”.

Similar statements could also be heard in the other school, where the student’s former teacher said that “*specifically in mathematics, I cannot say anything, I noticed that he has a different attitude in comparison to the others. For all the problems in the class he had an answer that was different from the common sense and from what we expect from children*”. The student’s current teacher mentioned that “*he always makes interesting remarks that surprise us in class; we don’t know where he takes them from*”.

Finally, we would like to say that the situation in the third school visited was not different. As soon as the SIR/AH teacher required information from the student’s school records, the supervisor just said that “*there are not many records about the student, the ones that we have just indicate conflict situations... there are many of them and with a high level of violence...*”. The teacher tried to justify the student’s assessment requirement by the SIR/AH teacher saying that “*he never pays attention or just when he wants to. He is not patient for most things... When he feels like, he works fast, but doesn’t care about details and good presentation*”.

By reflecting on these excerpts, we risk saying that the discourse is *explicit*, as it does not hide either meanings or secret knowledges; on the contrary, it explains what must be perceived – in this case, that high abilities are related to some school conducts and are expressed by school agents. It is worth highlighting that such conducts are equally related to strongly negative features, such as lack of interest by the student, and extremely positive accomplishments, such as writing and calculation development. This should be taken for granted, i.e. the rules that support the selection practices are the ones that guide behaviors and serve to distinguish and seek, outside the average, for the high ability subject according to adequate or inadequate states or behaviors.

We should not fail to observe that, even when the so-called high abilities in mathematics are involved, characteristics related to this practice were not as deeply explored and valued by the teachers interviewed as the other types of conduct. An example of that is valuing students that “produce unexpected and pertinent answers” (item 25 of the Observation Form) in the school environment, but such answers are not supposed to be strictly linked to a school content and can be related to any practice.

Considering that our observation field comprised the practices, it is possible to see that high ability subjects just *become such subjects* in relation to their conducts, since these will define and produce them as such. These subjects’ conducts operate in accordance to rules, which also constitute and are constituted by *power-language games*.

We think that such conducts are nothing more than the *materialization* of certain rules that constitute *power-language games*. In other words, the conducts give visibility to the rules that operate on the practice domain.

One can point out here the discontinuity of the discursive practices of high abilities in mathematics as evidenced by Jelinek (2013). The discourse of high abilities in education practices has been updated and has assigned less centrality to mathematics knowledge and more importance to conducts, i.e. to what the subjects do. We think that this is justified by the change in the rules of the *power-language games*, influenced by the (re)actualization of regimes of truth of knowledge about intelligence and the contemporary education perspectives of knowing-doing.

We also emphasize that we are no longer working with the normative framework of an intelligence that can be measured, but qualified. If in the last century IQ tests were used to “measure” the individuals’ cognitive potential, in contemporaneity, this procedure is no longer valid. The rules with which we have currently operated, in alignment with the neoliberal rationality, produce high ability subjects by considering behavioral characteristics that are desirable in a globalized world.

5. Otherness as a measurement game

We would like to resume here the comparative criterion for selection of high ability students using the expression “*the best*” as seen in the Student Observation Form (Figure 1): “the best students in the areas of language, communication and expression”, “the best students in the areas of mathematics and sciences”, “the best students in the areas of art and art education”, “the best students in extra-curriculum activities”, “best memory”, “best performance in sports”.

Such items, associated with remarks such as “he is a differentiated student” or “he could read and write when he started A20, and this is seldom seen in this school” or “he has always stood out from the group”, lead us to suppose that the selection of the high ability *learners* mainly occurs based on a rule that compares and measures. It is not an IQ test. Now measurement takes place through the relevance or discrepancy of conduct in relation to the others.

It is worth thinking that individualizing characteristics are valued and somehow account for the definition of a subject as a high ability *learner*. However, saying that an individual is “lonely, questioner, concerned with the others, self-confident”, among

other items in the form, does not support either the identification of the subject as a high ability *learner* or his or her referral to educative enhancement.

As such comparison is established in relation to the others, there is an *otherness* relationship mediated by *power-language games* intertwined with the selection practices, which mobilize meritocratic rules. Even understanding that high ability subjects are constituted in these practices as subjects with an allegedly individuality, they will be constituted in a comparison, in a relationship with themselves and the others.

Although the education system maintains the valorization of differences and multiplicity, what we really find is a constitution of differences and nuances around what has been understood as high ability *learner*. Such fact is intensified when we understand this meritocratic bias – consistent with the contemporary neoliberal thought and its evaluation practices – because there is nothing besides a policy of respect for “differences”, many of them supposedly preyed, and complementarity and correspondences between individuals.

The rules of these *power-language games* that drive the practices of high abilities include measurements; hence, as in a method, they establish comparative, hierarchical, ranking movements, leading even to institutional practices and contributing to the production and justification of rates such as IDEB, PISA, etc.

The practice of comparing is central to evidence that the high ability subject is no longer constituted in relation to the IQ test, because the contemporary practices no longer work with standard tests, but with instruments such as the Forms, whose function is different from those old tests. Comparisons act as a rule of *power-language games* and significations of a possible high ability subject.

In the school identification practices, the form will operate as an observation guide for the comparison to the other and not in relation to a simply theoretical norm. The norm now is in the relationship of individuals with one another. As comparison is useful to the government of populations (FOUCAULT, 2008a), it is a potent tool for us to govern ourselves in relation to ourselves and the others, thus producing particular forms of conduct.

What does the school institution do when faced with this? It follows the rules established in the practices, i.e. amidst multiple conducts it attempts to capture singularity, as the rules of the practices of high abilities guide by operating comparisons.

In this sense, the *power-language games* articulate discursivities that even allow non-similar conducts to be associated with the same identity. In the Student Observation Form, it is possible to find a conduct described as “the nicest and most well-liked” and immediately below “the most lonely and ignored”. But how can subjects with such different characteristics be included in the same form, which comprises characteristics of somebody that has been understood as a high ability *learner*?

As we have said above, the form is a language game, it is a power game, and on analyzing this game, we should pay attention to the rules established in the

configuration of that instrument. Among these rules, not only what can be similar or be compared coexist, but also what can be contradicted – procedures that converge and conduct us to the old method of searching for identities and capturing problematic differences as Plato and Aristotle once said: in this case, the named and produced identity of high ability *learners*.

6. How useful is the high ability subject? The attempt to govern conducts and the contemporary forms of life

If we consider that the different uses we make of words are relevant, we will understand that the meanings assigned to the expression *high ability learners* as well as the processes of identification of these subjects have resulted from reactualizations. As it was seen in Jelinek (2013a, 2013b), such reactualizations occurred under different government rationalities, involving what was understood as the individual's necessary and fair conduct in a particular society and a particular time.

In contemporaneity, the process of invention of high abilities has focused on particular conducts, namely: “the most independent, persistent and committed; critical of the others and themselves; the most original and creative; capable to lead”, among others⁸. These expected conducts are in accordance with a contemporary neoliberalism that both foments and supports the idea that individuals with such characteristics will maximize their participation in the market games. As Foucault said (2008b), neoliberal governmentality – especially the one constituted from the American neoliberalism – invests in the production of subjects to convert them into partners. The rules of this game enable a higher number of people to stay in the market game; for that reason, it is fundamental that the individuals act on themselves and the others in order to continue to participate and search for solutions for the difficulties with which society has been faced.

Therefore, we could say that the government issue is linked to the power issue – amidst *power-language games* – as a form of conduct.

If we regard the neoliberal governmentality as a group of techniques that make us behave in a particular way and not differently, we will understand that, in contemporaneity, the games seen as necessary among the current forms of life are devised taking into account some characteristics of possible subjects to produce desirable subjects.

In contemporaneity, if it is desirable that individuals become able to govern themselves, it is fundamental to foster conducts marked by capacity for exceptional observation, more developed abstraction and analysis of events from different perspectives. Questioning, originality and divergence in the field of ideas are also desirable. Such attitudes should not be overlooked in the school practices, as this subject-form is an aspiration of contemporary society. Therefore, such conducts will be valued by this movement and any other intended to select people suited for the standards established by contemporary governmentality.

⁸ Items included in the Student Observation Form.

Concerning high abilities, they are seen as necessary (ab)normalities, identified with the use of comparatives that render subjectivity calculable and “(...) enable people to be made into something – and to make something of themselves – for the sake of their subjective capacities” (ROSE, 1998, p. 39).

In Jelinek (2013), we showed a range of practices that function as conditions of possibility for the emergence of the subject we have called high ability *learner*. We also discussed the way that this individual has been captured in the contemporary scenario.

In effect, the practices in which intentionalities have been localized – in given rationalities – set the conducts that the subjects may evidence. Therefore, the highly able mathematics subject is not anterior to the practices, but supported by a complex relation network. It is in this conjuncture that we can say that the appearance of the object of those practices occurs “so that it is possible to ‘say anything’ about it, and several people are to say different things about it” (FOUCAULT, 1995, p. 51).

In conclusion, these are the subjects of *power-language games* who are constituted in practices and we regard them as high ability *learners*. These individuals are subject to language and power; they are produced by pedagogical truths through which they relate to themselves, and they move by means of techniques that subjectivate and encourage them to have desires and intentions.

Then, like in a game, the individuals are struck by a range of discursive truths, led to produce rule-determined speeches and conducts, and constituted as highly able mathematics *learners*. It is worth restating that they are historically and socially constituted. Historically, because they are constituted in the forms of life of which they are part; and socially, because they are apprehended in the collective – given that meanings are collectively shared.

In sum, when we search for relationships between subjects and practices, we can understand them as *power-language games*, i.e. as ruled activities that produce behaviors in pedagogical forms, since they have a regulating function and produce – *in them* and *from them* – modes of action and conduction in student and teacher subjects, thus inventing the so-called high ability *learner*.

References

Aurich, G. R. (2011). *Jogos de verdade na constituição do bom professor de matemática*. Dissertation, Porto Alegre, Universidade Federal do Rio Grande do Sul, Brazil.

Birman, J. (2002). Jogando com a verdade: uma leitura de Foucault. *PHYSIS: Revista de Saúde Coletiva*, 12 (2), 301-324.

BRASIL. (1995). Ministério da Educação e do Desporto. Secretaria de Educação Especial. *Subsídios para a organização e funcionamento de serviços de educação especial*. Brasília: MEC/SEESP.

Caldeira, T. (1988). A presença do autor e a pós-modernidade em antropologia. *Novos estudos CEBRAP*, 21, 133-157.

Ferreira, T. (2004). Problematizando uma estratégia multimetodológica de pesquisa em teatro e educação. *Olhar de Professor*, 7 (1), 43 – 66.

Foucault, M. (2008a). *Segurança, território e população*. (E. Brandão, Trans.). São Paulo: Martins Fontes.

_____. (2008b). *Nascimento da Biopolítica*. (E. Brandão, Trans.). São Paulo: Martins Fontes.

_____. (2006). *Ditos e Escritos V: ética, sexualidade, política*. MOTTA, M. (Eds.). (E. Monteiro & I. Barbosa, Trans.). Rio de Janeiro: Forense Universitária.

_____. (2003). *A verdade e as formas jurídicas*. Rio de Janeiro: Nau.

_____. (1995). *A arqueologia do saber*. (L. Neves, Trans.). Rio de Janeiro: Forense Universitária.

Geertz, C. (2001). *Nova luz sobre a antropologia*. (V. Ribeiro, Trans.). Rio de Janeiro: Editora Jorge Zahar.

Jelinek, K. (2013a). A prática discursiva das altas habilidades em matemática. *Bolema*, 27 (45), 193 – 214.

_____. (2013b). *A produção do sujeito de altas habilidades: os jogos de poder-linguagem nas práticas de seleção e enriquecimento educativo*. Thesis, Porto Alegre, Universidade Federal do Rio Grande do Sul.

Miguel, A. (2010). Percursos Indisciplinados na Atividade de Pesquisa em História (da Educação Matemática): entre jogos discursivos como práticas e práticas como jogos discursivos. *Bolema*, 23 (35A), 1 – 57.

Rose, N. (1998). Governando a alma: a formação do eu privado. In T. Silva (Eds.), *Liberdades Reguladas: a pedagogia construtivista e outras formas de governo do eu* (pp. 30 – 45). Petrópolis: Vozes.

Sarmiento, M. (2003). O estudo de caso etnográfico em educação. In N. Zago et.al. (Eds.). *Itinerários de pesquisa: perspectivas qualitativas em sociologia da educação* (pp. 137 – 179). Rio de Janeiro: DP&A.

Silva, T. (2000). *Teoria cultural e educação – um vocabulário crítico*. Belo Horizonte: Autêntica.

Tyler, S. (1992). La etnofraía posmoderna: de documento de ló oculto a documento oculto. (C. Reynoso, Trans.). In C. Geertz & J. Clifford et.al. *El surgimiento de La Antropologia Posmoderna* (pp. 297 – 313). Barcelona: Gedisa.

Veiga-Neto, A. & Saraiva, K. (2009). Modernidade líquida, capitalismo cognitivo e educação contemporânea. *Educação e Realidade*, 34 (2), 187 – 201.

Veiga-neto, A. (2007). *Pardigmas? Cuidado com eles!* In M. Costa (Eds.). *Caminhos Investigativos II: outros modos de pensar e fazer pesquisa em educação* (pp. 35 – 47). Rio de Janeiro: Lamparina Editora.

Wittgenstein, L. (2008). *Investigações Filosóficas*. (M. Montagnoli, Trans.). Petrópolis: Vozes.