School Inclusion Policy and Curricular Practices: Teaching Strategies for the Conceptual Preparation of the Target Public of Special Education

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Abstract: In Brazil the inclusive education policy and curriculum practices aimed at disabled students have been the subject of research and debate. These students, despite having guaranteed access to regular education, find their schooling processes restricted due to lack of knowledge of their learning characteristics. In both regular classes and specialized education support questions arise about what and how to teach these students and which curriculum

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practices enable their conceptual preparation processes. In this paper, we analyze teacher discourse (obtained in group interviews) and episodes of interaction and teaching actions carried out in specialized education support (in Multifunctional Resource Rooms - MRR) in regular schools in Vale do Itajaí, SC. It is aimed to problematize policy guidelines, curricular practices, and the role of MRR in these students’ schooling. The teacher discourse and analyzed episodes are an illustrative excerpt of collaborative research with MRR teachers in 2012/2013 carried out by two National Observatories of Special Education, linked to the CAPES’ National Education Observatory Program. The results of the research indicate contradictions, segmentations, and the fragility of policy in relation to the locus and the processes of schooling and potential curricular practices of the disabled students’ conceptual preparation.

**Keywords:** inclusive education policy; curriculum practices; conceptual preparation; specialized pedagogical support.

**Escuela Política de Inclusión y Prácticas Curriculares: Estrategias de Enseñanza para la Elaboración Conceptual de la Audiencia Objetivo para la Educación Especial**

**Resumen:** En Brasil, las políticas de inclusión escolar y las prácticas curriculares dirigidas a los alumnos con discapacidad de las escuelas públicas de educación regulares han sido objeto de investigación y debate. Estos, a pesar de haber garantizado el acceso a la educación regular, sufren restricciones en sus procesos de escolarización debido a la falta de conocimiento de sus características de aprendizaje. Tanto en las clases de educación regular, como en la educación especializada manifiestan preguntas acerca de qué y cómo enseñar a estos estudiantes y qué prácticas curriculares permiten calificar sus procesos de elaboración conceptual. Frente a estos dilemas, en este artículo, se analizan los testimonios de los profesores (como resultado de la entrevista de grupo) y episodios de interacciones y acciones docentes realizadas en una sala de atención especializada (Sala de Recursos Multifuncional - MRR) de las escuelas regulares en el Vale do Itajaí, SC, con el propósito de discutir las orientaciones de la política, las prácticas curriculares y el lo papel de las MRR en el proceso de escolarización de estos alumnos. Las declaraciones de los profesores y los episodios analizados resultan de investigación colaborativa desarrollados en las MRR en 2012/2013, vinculada a dos Observatorios Nacionales de Educación Especial, articulados a la Red Nacional de Observatorios - CAPES. Las reflexiones indican las contradicciones, divisiones y la fragilidad de la política en relación con el lugar y los procesos de la escolarización y las potenciales prácticas curriculares de elaboración conceptual de los estudiantes en general y en particular, de los alumnos con discapacidad.

**Palabras-clave:** políticas de inclusión escolar; prácticas curriculares; elaboración conceptual; apoyo pedagógico especializado.

**Política de Inclusão Escolar e Práticas Curriculares: Estratégias Pedagógicas para Elaboração Conceitual do Público alvo de Educação Especial**

**Resumo:** No Brasil, as políticas de inclusão escolar e as práticas curriculares direcionadas a escolarização de alunos público alvo da Educação Especial têm sido objeto de indagação e debate. Estes, apesar de ter garantido o acesso ao ensino regular, sofrem restrições em relação aos seus processos de escolarização devido ao desconhecimento de suas características de aprendizagem. Tanto nas classes comuns do ensino regular, como no atendimento educacional especializado, não raro, manifestam-se questionamentos sobre o que e como ensinar estes alunos e que práticas curriculares viabilizar tendo em vista a qualificação dos seus processos de elaboração conceitual. Em face desses dilemas, no presente artigo, analisam-se depoimentos de professores resultantes de entrevista grupal e episódios de interações e ações docentes efetivados em Sala de Recurso Multifuncional (MRR) de escola regular da região do Vale do
Itajaí, SC, com o propósito de problematizar as orientações da política, as práticas curriculares e o papel das MRR no processo de escolarização desse público. Os depoimentos e episódios analisados são um recorte ilustrativo e resultam de pesquisa colaborativa desenvolvida no período 2012/2013 junto a professores de MRR, sendo esta vinculada a dois Observátórios Nacionais de Educação Especial, articulados à rede nacional Programa Observatório da Educação da CAPES. As reflexões indicam as contradições, as cisões e a fragilidade da política em relação ao lócus e aos processos de escolarização e as potenciais práticas curriculares de ensino-aprendizagem pela via da elaboração conceitual dos alunos em geral, e em particular, do público alvo da Educação Especial.

**Palavras-chave:** políticas de inclusão escolar; práticas curriculares; elaboração conceitual; suporte pedagógico especializado.

**Introduction**

The twenty-first century heralded political and legal landmarks, decided by national and international bodies, in relation to school inclusion policies for students with disabilities, global development disturbances, and special abilities. In the first decade of the 2000s the volume of government documents published, based on the General National Education Law, LBDEN no. 9394/96 (Lei de Diretrizes e Bases da Educação Nacional), demarcated the place and role of various interest groups in the definition of education policies aimed at guaranteeing rights and equality of opportunity to this public.

These new influences and interests are an indication of alterations in material and in the discursive terrain of educational policies on a global scale, or in what Lingard, Creagh, and Vass (2012, p. 315) call the “field of global policies,” which have significant implications for the definition of educational policies in Brazil.

In this period (based on actions commenced the previous decade), the Ministry of Education intensified policies aimed at the construction of inclusive educational systems. The National Special Education Policy in the Perspective of Inclusive Education (Brasil, 2008) can be considered to be the defining mark of this proposal, revealing in its discourse a connection with other legislation approved in the period, but principally with the commitments assumed by the Brazilian government as part of the United Nations International Convention on the Rights of Disabled People, signed in New York in 2007.³

By signing this agreement participating states recognized the right of disabled people to education and committed themselves to ensuring an inclusive educational system at all levels, as well as learning throughout life. They also committed themselves to ensuring people with disabilities the possibility of acquiring the practical and social skills necessary to facilitate their full and equal participation in the educational system and in life in the community (Brasil, 2007).

National Special Education Policy in the Perspective of Inclusive Education (Brasil, 2008a) implemented by Decree no. 6.571/2008 (Brasil, 2008b), in turn, is a response to the commitment assumed by the Brazilian government, presenting the national references for the construction of educational systems and the organization of inclusive schools, defining the target public of Special

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² Chapter 5 of the General Education Law, Law no. 9394/96, dated 20 December 1996, contains three articles, including article 58, which stipulates special education as the modality of education aimed at students which special needs. It also allows for specialized education, preferentially to be offered in the normal school network, at all levels of education.

³ The Convention on the Rights of People with Disabilities gained visibility in Brazil following the passing by the Brazilian Congress of Legislative Decree no. 186, dated 9 July 2008 (Brasil, 2008a), and later Decree no. 6.949 dated 25 August 2009, signed by the then president Luís Inácio Lula da Silva (Brasil, 2009a).
Education and delimiting the nature of Specialized Education Provision (AEE) in the school inclusion process.

After its approval, other regulations were signed and guidelines published in 2009, 2010, and 2011, regulating the functioning of Specialized Education (Atendimento Educacional Especializado - AEE) in Multifunctional Resource Rooms. Amongst these was CNE/CEB Resolution No. 4/2009, which established Operational Directives for Specialized Education Provision in the Special Education Mode of Basic Education, the 2010 Guidance Manual for the Implementation Program for Multifunctional Resource Rooms, and Decree No. 7.611/2011 which regulated Specialized Education Provision and defined the distribution of FUNDEB resources, allowing the dual registration of students in regular education and specialized education.

In these documents the definition of Special Education is defined as a type of teaching which at all levels, stages, and modes delimits specialized education as a service that makes resources available and provides orientation about their use in the learning and teaching process in regular teaching and the differentiation of its role as complementary/supplementary in relation to the teaching of students with disabilities, global development disturbances, and special abilities (Brasil, 2008).

These policies are not always the same. In the various contexts in which they are produced they assume differentiated contours, while they are also translated in the context of practice, within the school, through tactics, which include speech, interaction, intervention, and actions. In addition, they also vary in their degree of clarity, specificity, and coherence, which by definition allows or demands considerable interpretative action in the sense of translating them (Maguire, Ball and Braun, 2013).

Using these documents as a reference (Brasil, 2008a, 2009, 2010, 2011) and contrasting them with statements by some teachers and illustrative foci of a project carried out in MRR in a regular school in a municipality in the Vale do Itajaí region in Santa Catarina state, in this paper it is sought to problematize policy orientations related to the role of Specialized Education in the school inclusion process of some public students who are the target of Special Education.

The principal purpose of the article is to bring to the debate the guidelines, or the lack of them, for the curricular practices required in the educational process of the target public of Special Education. What is investigated is the possibility that these guidelines can in practice increase the gap between regular and specialized education provoking a reverse inclusion and/or stimulating the development of what Lingard (2007, p 246) has called the “pedagogy of indifference.”

In the author’s conception, these pedagogies can be seen as profoundly therapeutic in the care they provide students, but indifferent in terms of effective work with differences and in relation to how to make a difference in regard to learning opportunities in the school environment (Lingard, 2007).

Notwithstanding the set of principles and proposals of the public authorities, a large part of these students do not have their learning possibilities guaranteed in the context of school inclusion. In relation to students with intellectual disabilities, for example, the inclusion process has been hindered by ignorance of their learning characteristics and the belief in their lack of capacity for abstract thought. Traditionally, the curricula for these students – a significant majority of whom were until then in special schools – have been organized on the basis of innatist or behavioral assumptions, centered on perception-motor and functional activities, neglecting with rare exceptions, their cognitive capacities, and consequently their conceptual preparation processes.

In clinical and pedagogical assessments what predominated was the finding of deficits of subjects and/or ‘absences’: sensorial, motor, and cognitive based on the analysis of “their physical aspect (the body of the disabled person); their language (the form of speaking and coherence); the
time of their movements and their words; the attention [...] the autonomy to deal with situations in
social life [...]” (Padilha, 2000, p. 204).

Given these diagnostics, in the sphere of social inclusion schools adjust their programs to
individual characteristics of the disabled, reducing the possibilities of these student to access levels
of autonomy, capacity of abstract thought, and qualified interaction with other colleagues. Although
the professionals involved were concerned with the learning of these students, advances in
pedagogical practices occurred, though they are not very significant. Not rarely questions were
encountered about what it meant to teach students with disabilities, global disturbances, and special
abilities, both in regular school and in specialized education.

This questioning intensified in light of the generic and not very concise guideline of policies
about the necessary curricular practices and the pedagogical work to be carried out with this public.

In this article it is intended to expand this discussion bringing to the debate the policy text,
teacher statements, and some aspect of a conceptual pedagogical activity carried out in the MRR,
resulting from the collaborative investigation process carried out in 2012-13 by the National Special
Education Observatory (Observatório Nacional de Educação Especial - ONEESP) and of later follow-up
studies by the Observatory of Schooling of Students with Intellectual Disabilities.

The Place, the Subjects, and the Research Methodology

The National Special Education Observatory (ONEESP), coordinated by Prof. Enicéia
Mendes (Universidade Federal de São Carlos), with the support of the CAPES Education
Observatory Program, involves 203 researchers in 16 states and 20 Post-Graduate Programs in
Education in Brazilian third level institutions. Since 2011, ONEESP has carried out networked
research focusing on the assessment of implementation programs for Multi-Functional Resource
Rooms (MRR) in sixteen Brazilian states.

The Observatory of the Education of Students with Intellectual Disabilities, coordinated by
Prof Márcia Denise Pletsch (Universidade Federal Rural do Rio de Janeiro) has been carrying out
networked research since 2013, including researchers from three Post-Graduate Programs in
Education (PPGEs): Universidade Federal Rural do Rio de Janeiro (UFRRJ), Universidade Estadual
de Santa Catarina (UDESC), and Universidade do Vale do Itajaí, also from Santa Catarina. It is
sought not only to investigate the teaching and learning processes of these students in municipal
education networks (in the states of Rio de Janeiro and Santa Catarina), but also to use the databases
available in INEP for the analysis of the participation and the passing of intellectually disabled
students in SAEB and Prova Brasil examinations.

Since 2011 ONEESP has been carrying out a mixed research project involving local studies
with the administrators responsible for Special Education in the public education system and
resource room teachers, based on collaborative research methodology combined with a nation
survey. This is still ongoing and aims to obtain data from a sample of 2500 MRR teachers, through a
questionnaire made available on an internet site.

The collaborative research is based on two simultaneous angles of action: the continued
education of teachers and focus group interviews. While one angle emphasizes education to
encourage teachers to examine their own practices, the other invests in the collection of data and
collective discussions through focus groups. Two fundamental aspects characterize the collaborative
research: education and research, which defines it as an educational and formative dimension
(Oneesp, 2010).

In Santa Catarina the collaborative research was carried out in 2012 in municipal education
systems in Balneário Camboriú and Florianópolis. The investigative work involved the organization
of focus groups in six meetings with a total of 40 hours in Balneário Camboriú and four meetings
with a total of 20 hours in Florianópolis. In the meetings the groups discussed the trigger questions of the interview organized in three aspects: teacher education for school inclusion; assessment of students with special needs; organization of teaching in the MRRs and common classrooms.

For the purposes of this article only some results from the data collection and the continued education carried out in Balneário Camboriú will be discussed, focusing on teaching in MRRs and common classes.

In Balneário Camboriú 23 teachers participated in this study, of whom 15 had graduated in pedagogy and five in special education. The majority of the teachers had done post-graduate courses in Special/Inclusive Education (10), while another nine had courses in other areas (Psychopedagogy, Child Education, School Administration, School Physical Education, Child Education [Early Years], and Secondary Education).

The continued education work, carried out simultaneously to the data collection, required the study of conceptual preparation and defectology, based on the work of Vygotski (1997, 1989, 1993) and Luria (1986), taking into account that the focus of debates was the organization of MRR teaching. Associated with the study was the encouragement of certain practices and the socialization of experiences carried out in the MRR during the period of the study.

Teaching practices and interactions between teachers and students in the MRR of the schools studied are fertile sources for the analysis and understanding of curricular practices which improve and allow the process of conceptual preparation of students and which can be the object of the schooling process, irrespective of whether they occur in the common classroom or in specialized education.

Considering its limits and space, this article presents some points from the material collected by the teachers. In the universe of discussions held, it was chose to analyze the discussion of the focus group and only one representative episode, since they showed in a striking manner the processes of conceptual preparation of MRR students.

The School Inclusion Policy in Debate: Specialized Education, Schooling, and Curricular Practices

It is not intended to discuss all the aspects covered by the policy, but rather to focus on its guidelines about the organization of specialized education in the schooling process of the target public of Special Education. We start from the assumption that in its definition it privileges a “super-specialized” service and special education teacher (Garcia, 2013), with functions that by priority are directed to the provision of “equipment, accessibility resources, and pedagogical material” (Brasil, 2010, p. 6) which imputes them a place stripped of meaning in a secondary and peripheral place in the teaching-learning process and the schooling of these students. This place or ‘non-place’ can be seen both in the definition of the service and in the description of the attributions of the MRR teacher.

According to the Special Education policy in force (Brasil, 2008) specialized education: Identifies, prepares, and organizes pedagogical and accessibility resources which eliminate barriers to the full participation of students, taking into account their specific needs. The activities carried out in specialized education differ from those carried out in the common classroom, and do not substitution schooling. This service complements and/or supplements the education of students aimed at autonomy and independence in school and outside it. (p. 16)

It is difficult to conceive how the service is structured and offered within the school by teachers with a background in pedagogy and directly involved in the school inclusion process of their students.
How can a school service be created whose attributes are separate from the social function of the school and which has as its “principal focus the knowledge historically produced and systematized in the school form” (Garcia, 2013, p. 108)?

In addition, it is also difficult to identify, prepare, and organize pedagogical resources and activities stripped of content, peripheral to the curriculum and empty of possibilities in terms of the preparation of concepts. “Without content there is no development of the mind, because it consists of modes of possessing culture and its gradual acquisition” (Sacristán, 2000, p. 22).

In his discussion of the educational and social meaning of education, Sacristán (2000) groups the functions and purposes of education in four general objectives: providing support for democracy, stimulating the development of students’ personality, spreading and increasing knowledge and culture in general, and inserting the subjects in the world. Considering the attributions stipulated for specialized education, it seems impossible for the latter to be able to contribute to the purposes of assuring the participation and learning of the students’ special education in schools is aimed at.

Three years after the approval of the policy, Decree no. 7.611, dated 17 November 2011, once again emphasized in Art. 2, §1 that specialized support services will be called specialized education, understood as a set of activities and accessibility and pedagogical resources, organized institutionally and continually, provided in such a way as to:

I – complement the education of students with disabilities and global development disturbances, with permanent support limited in the time and frequency of students in multi-functional classrooms; or

II – supplement the education of gifted students or those with special abilities.

The complementarity or supplementarity of a service or a teaching attribution in a school context delimits the margins of action, distinguishing teaching roles and spaces and, contradictorily, as a reverse teaching process, contributed to increasing the gap between regular and special teaching, between the specialized education teacher and the normal education teacher.

This polarization or distancing can be seen in the interviews with teachers. When asked about the AEE function in the school inclusion process, some answered:

P1 – Use differentiated strategies, seeking to work with their abilities, potentials, and difficulties.

P2 – Prepare pedagogical strategies for a better development of the student.

P6 – Develop and encourage resources and adaptations to the needs of each student.

P10 – Through AEE we seek to develop the specificity of each student.

P12 – The AEE function is complementary and/or supplementary to learning.

In the teacher’s discourse – like an echo of the political discourse – an emptying of his or her function is revealing, an indefiniteness or imprecision of his pedagogical task: we used differentiated strategies, resources, and adaptations to the needs of each one, development of the specificity of each student, complementation, supplementation. But, what exactly does this service teach? What curricular practices orientate action and intervention?

In the definitions of the curriculum present in the school dynamic, the central question which serves as a backdrop for schools “[...] is knowing which knowledge should be taught. In a more synthetic form, the central question is: what?” (Silva, 1999, p. 14) What constitutes the curriculum in specialized education?

From another point of view, Lingard and Mills (2007, p. 239) warn that certain structural and political conditions of teaching result in pedagogies of indifference. Indifference to overcoming the lack of intellectual demand required for their work, indifference in connecting with the cultural capital necessary to make a difference in the learning of their students. The pedagogy can be effective in offering support to students, but this is not sufficient to make a difference.
On being asked about the function of the common class in the school inclusion process and about the relationship of the MRR curriculum and the common class (such as responsibility for literary learning), the teachers witnessed the distancing emphasized in the policy text:

- **P1**: The common class should work with the concepts necessary for the schooling phase, involving and improving all students.
- **P8**: The common classroom should favor the learning of content.
- **P12**: The function of the class is teaching the school curriculum, of school disciplines.
- **P13**: Common class: do this, appropriating knowledge, conflicts, teach them to read and write. MRR works with the difficulties of each student and the common classes have the content to be worked with by all students.

In this announced divorce, which is intended to be inclusive, one teacher can be observed looking at the specific needs of their students, organizing resources adapted for this, but with a background empty of meanings, concepts, and symbols, and another looking for knowledge, but possibly ignoring the specific needs of students.

When responsibilities for the literacy process are discussed, this divorce is shown to be even more ‘litigious,’ with few possibilities of reconciliation between the parties:

- **(P14)**: The responsibility when he goes to school is the teacher in the classroom. We help learning with games with often lead to literacy.

The debate about the responsibilities for teaching students with special needs to read and write is not new. Since the implementation of integrationist policies in the 1980s this rather unfruitful debate or conflict has survived. This was, and continues to be, based on the polarization of responsibilities and the understanding that the role of specialized education was educational reinforcement. What keeps it alive is a reduced and mechanized conception of the literacy process, restricted to the codification and de-codification of the language, a concept of learning circumscribed to the classroom space and a parallel conception of special education which desires to be transversal and inclusive.

When the MRR teacher states that regular teaching is responsible for literacy, since “The student is from the school,” it has to be asked what about the student and the MRR? Where is the MRR located? As Garcia stated (2013, p. 109) “to a great extent the modi operandi of the resource rooms, from the point of view of the teaching work carried out there, is maintained as a parallel to the work realized in the common classroom, which has little impact on the schooling process of those in special education.”

From the point of view of the school inclusion policy and its translation by the interviewed teachers, what can be observed from the impasse between complementation and supplementation of teaching, the untying of the process of schooling and literacy, and the restriction of activities to the support of pedagogical resources is an historical and permanent attribution of a place in limbo to special education, a possibility of being created in an emptiness, a non-place, a non-function, something spontaneous, an individualization of teaching. It seems what is at stake here is a reverse inclusion.

**Conceptually Prepared Curricular Practices for Students Who are the Target Public of Special Education**
In the “Guideline Document for the Multifunctional Resource Classroom Implementation Program” some teacher attributes are highlighted in which can be found the specialized procedures and, generically among the list of activities, the development of superior mental abilities.

Among the attributions of this professional are:
- Organization of pedagogical strategies and identification and production of accessible resources; teaching and development of AEE activities, such as: Libras (sign language), Braille, orientation and mobility, Portuguese for deaf students; accessible computing; Alternative and Augmentative Communication (CAA),
- activities to develop superior mental abilities and curricular enrichment activities (Brasil, 2010, p. 9, emphasis added).

Working with superior psychological functions is certainly an important MRR function, because it is important in any schooling process. Therefore, this is a function of school, irrespective of the place where the student is. The problem here refers to fact of situating them as something specific to special education, and more than this, it refers to the fact of considering it possible to work with them stripped of content, knowledge, and concepts, which assist their development.

The presence of this specific attribution in the list of attributions of the MRR teacher deserves greater consideration since it was through them and the discussions with the interviewed teachers that the continued education was structured during this research process.

Continued education’s purpose was to look for theoretical and methodological references, which could allow teachers reflect on their statements and to problematize the policy and their practices. It was decided to reflect on the role of MRR in the education of their students through the theoretical and practical study of the theory of conceptual preparation proposed by Vygostki (1997, 1989, 1993) and Luria (1986).

This approach was not randomly chosen. It had the explicit intention of giving meaning to the pedagogical work carried out in MRR and its immediate and direct relationship with student schooling processes. Furthermore, it involved problematizing the unfeasibility of acting on the margins or in the vacuum of complementarity, which the specialized education policy aims at.

In other words, the studies carried out intended to show that the conceptual preparation process requires from teachers not only the use of knowledge from didactic fields – to propose pedagogical strategies which configure support for their students in various learning situations – as well as a dominion of concepts in various areas of knowledge and the mobilization of the appropriate means - instruments and symbols – without which the work cannot be carried out.

The mediated nature of superior psychic processes, a key element of Vygotski’s theory (1989), forms the basis of the proposed conceptual preparation of curricular practices. It means assuming that the possibilities of working with the conceptual preparation of students in general, and in particular of students with disabilities or global disturbances, or gifted students requires the use of “psychological tools or instruments” - “social, non-organic or individual devices” (1989, p. 93).

Looking at the specific case of disabled students, it can be seen that it is exactly because they dominate abstract thought with greater difficulty that the school should develop this ability using all possible means. “In a summarized form, the task of the school consists in not adapting to defects, but rather overcoming them” (Vygotski, 1997, p. 45).

To imply the connection of complex processes, such as abstraction and generalization, conceptual preparation develops in childhood through what Vygotski (1989, 1993) calls thinking with potential and complex concepts. In complex thinking, a predominance of generalizations – tendencies to unify, reunite, groups – can be found which the child prepares based on immediate real bonds, linked to immediately lived experiences, for which reason they are always temporary, focused on objects and daily life.
In a more elaborate manner, supported by logical linkages, the potential concept or scientific concept deals with abstraction, in other words attention is focused on the actual act of thinking, the abstract trait of the set of elements is stable and is not modified in accordance with the situation experienced.

Here, the immediate concrete experience comes to be understood by thought. In this way, concepts only exist when the abstract traits are synthesized and in this process the word, the psychological instruments, and the teacher have the fundamental role of directing the mental processes involved.

The question that accompanies this task is: how to structure teaching activities in this direction? What are the most suitable tasks?

In problematizing this understanding, we examine an episode of interaction and action carried out by MRR teachers participating in the research/continued education which is being discussed in this paper. Its analysis allows an understanding of how this, through a game (in other words, a pedagogical resource), mediates working with curricular content, mobilized psychological instruments and established interactional agendas and discussions about this knowledge with students in the conceptual preparation process.

**The Base Three Game Episode in the Multifunctional Resource Room**

The episode analyzed focused on the development of an apparently simple, dynamic, and easy-to-play game, but which, depending on the tasks and mediations realized, is transformed into a potential opportunity for understanding the foundation of the concept of potentiation (a complex content in the area of mathematical knowledge) and the mathematical operations involved in it. It is a game, which in continued education was called Three Pieces or Base Three.

In the continued education activity, after experiencing the game and reflecting on its ludic possibilities, mediations were carried out seeking to understand the concepts and procedures involved. In the game, and through it, studies of the authors and concepts being debated were expanded, as well as it use by the teachers in their classrooms.

The result of its use was recorded and used for analysis and for theoretical insights in later continued education meetings. In turn this led to other study and development experiences, which contributed to the discussion of the organization of curricular practices in MRR.

The Base Three game requires the formation of groups of 2 - 4 players. One die and a set of 30 cards with different shapes and colors are used: 10 red circles, 10 blue squares and 10 green triangles and a white rectangle. According to the rules (see Figure 1), the die is rolled and the amount thrown is removed in red circles. Each three red circles are exchanged for a blue square; each three blue squares are exchanged for a green triangle, each three green triangles are exchange for a white rectangle and the game is won.
The game is simple in appearance and accessible to various publics. The simple observation of its dynamics in the act of playing allows the means of thought and operating of each player to be identified. In other words, it allows the immediate identification of conceptual preparation processes of the subjects. Some after rolling the die remove the amounts rolled, first in red pieces and then change them for blue pieces, if the amount rolled is equal to or above three. This thought – which Vygotski (1993) calls complex thought – has the characteristic of the formation of immediate links between objects and the establishment of relationships between different concrete impressions. “In a complex, the connections between its components are concrete and factual, and not abstract and logical [...]” (Vygotski, 1993, p. 53).

Others when they role a number/quantity equal to or higher than three operate in an abstract manner, in other words, they immediately remove the blue piece which is worth three. This attitude is indicative of a conceptual operation on the path of abstraction and of conceptual thinking. In this case the player develops thought through analysis/abstraction and synthesis/generalization. Potential concepts are being used, in other words, the subject observes a group of objects and generalizes them after being reunited with a common attribute.

The most accurate analysis of the composition of the game, in turn, allows the identification of the content or mathematical concepts implicit in the operation of the game, in other words, the “constitution of the conceptual system of potentiation and its intertwining with the concepts of numeration, addition, multiplication, logarithmic and exponential” (Damasio, 2006, p. 4) as can be observed in Figure 2.
Figur 2. Operation of potentiation involved in Base Three game.

Explained in the proposed game is the basis for the preparation of the logic and the defining sequence of the conceptual potentiation system. However, if not mediated by the teacher with the use of appropriate instruments and symbols, so that the students appropriate the concept in the intended manner, it can become just one more entertaining game.

In the research/continued education teachers are asked to produce this material and play it in the MRR, however, forms of registering the process of the game by the students have to be guaranteed. Teachers must ensure that students are able to note down all rounds, all pieces acquired, and all exchanges. Like any social function of writing, this record should serve for the reconstruction of the process of the game by students and other teachers, as well as analyzing students’ conceptual preparation processes.

These guidelines start from the assumption that “all superior psychic functions are mediated processes, and the symbols constitute the basic means to dominate and direct them. The mediating symbol is incorporated in its structure as an indispensable part, [...] central to the process as a while” (Vygotski, 1993, p. 48).

Creating situations that demand observation, recording, and analysis is fundamental for the learning of all students, notably MRR students, who can in this way show in different manners and through various strategies their learning capacities.

Figures 3 and 4 show how a student with intellectual disabilities thought about and registered the game process. It also revealed the mediations made by the teacher in order to incorporate other registration resources and to thereby conceptually prepare in an active and interactive manner.

In the continued education group meetings teacher L. described the process of playing the game with J. F., who in principle demonstrated difficulties in understanding the rules of the game, which meant that the game had to be repeated twice before asking him to record it. In the second meeting J. F already knew how to play and recorded his moves (J) and those of his teacher (L), as shown in Figure 3:
The analysis of the record allows the identification of some conceptual dominions by J. F. He recognizes numbers – at least up to nine – uses symbols to differentiate his results and those of the teacher, works with quantities in the exchange of pieces, differentiates according to the criteria of form.

According to Vygotski (1989, 1993) there exists a dynamic relationship between the two types of concept development, which suggests that to learn a scientific concept, the individual needs dynamics processes for the ‘descent’ of daily concepts to understand them in practical reality, and the consequent ‘rising’ activity towards abstraction, always mediated by the teacher. In this ascendant and descendent movement, the individual changes his psychological structure to the extent that it understands and reworks the concept.

After this the teacher made new interventions in the game record (Figure 4), making new requests:

In this game I asked the student to record in addition what he was already doing the exchange of pieces. For this he created the symbol (+). I also asked him to add the value which each person rolled on the die. The game was not completed...

On 11/06 to continue the game, we read what had been done and recorded. The student understood what he had recorded and we continued the game. This was very good.
The reports and records are samples of the conceptual preparation process, which is improved through mediation by the teacher and the possibilities of new records and new ways of resolving the task. Furthermore, they explain the relevance of psychological instruments in which teacher and student resort to the mediation process, in other words to: language, writing, the numeration and calculation system, mnemonic strategies, drawings, the dividing lines, and all the symbols established by convention in order to construct mental processes of knowledge appropriation.

In conceptual preparation the word is, first, a mediator of the process, afterwards becoming a symbol of the concept. Children explore real, sensorial material, and work intellectually with it, guided by the word in function of interlocutions.

This intervention takes into consideration the idea that “a concept is not an isolated, fossilized, immutable formation, but rather an active part of the intellectual process, constantly at the service of communication, understanding, and the solution of problems” (Vygotski, 1993, p. 46).

Other interventions can be made in the continuity of work with superior psychological functions and with a more advanced appropriation of notions of potentiation. For example, the teacher can ask the student to register instead of forms the number and operation carried out, or also that he organize exponential notation forms, introducing the idea of multiplication with equal factors through other records such as the use of pieces and collages. In short, the possibilities for the student to operate intellectually, process scientific concepts, dialogue with knowledge and achieve abstract forms of thought are endless.

The reported experience allows an understanding of the potential possibilities of teaching-learning of curricular practices of conceptual preparation, more than this they reveal the infeasibility of MRR disconnected from schooling processes. In addition, they show the responsibility of the service, the MRR teacher, the teacher of the regular classroom, and all who work with these students to give them a scientific concept of the world, of discovering with them the relations between the...
fundamental phenomena of life (nature, work, and society) and relations of a non-concrete order made feasible through the use of psychological instruments, such as: language, writing, the numeration and calculation system, mnemonic strategies, artistic productions, diagrams, drawings, and all the symbols established by convention.

These concepts have consequences for how teachers proceed. These are not limited to the indiscriminate use of resources and strategies, nor are they restricted to the teaching of formal definition stripped of meaning and significance, but rather allow students the possibility of using the concept and to express the various forms of preparation, which are produced in interactions in the classroom and in AEE.

**By Way of Conclusion**

As a summary of the principal ideas discussed and analyzed in this article, it can be stated that the curricular practices which lead to the conceptual preparation of the school students who are the target public of special education are not differentiated from the conceptual preparation practices used with the other students. The difference lies in the concepts of learning and in the teaching practices which have been triggered, both in regular schools and in MRR, and which to a greater or lesser extent contribute to expanding or limiting the possibilities of conceptual preparation of students and their schooling processes.

This finding allows questions to be raised about the Special Education policy, notably about the consequences of generalized and not very concise guidelines for the required curricular practices and the pedagogical work to be carried out with this public. The emphasis of the policy on defining the frontiers of specialized education work and its restriction to complementarity and as a supplement in relation to education has contribution to increasing the distance between special and regular education and encouraging a reverse inclusion.

Furthermore, this means stating that, implicit in the discourse of inclusive education or the school inclusion of subjects with disabilities, global development disorders, or who are gifted, is a contrary movement, in reverse, towards segmenting, separating, and distinguishing between the teacher, the students, and the pedagogical work of this service within the school.

The responsibility of the teacher in the regular classroom for the schooling process of all students cannot be denied, nor the need to mark the space of the regular classroom as the locus for the implementation of education. However, this emphasis cannot result in the relegation of the work of the MRR teacher to a secondary level, or in their marginalization in relation to the schooling process of their students.

From the point of view of the translation of the school inclusion policy in the context of the practice, what is observed is a restriction of MRR activities to the support of pedagogical activities, an individualization of teaching and an isolation of work, which contributes to the maintenance of an idea of a non-place to special education in school, an emptying of the curriculum, and a perpetuation of the pedagogy of indifference.
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