Occupational therapy and education: the propositions of occupational therapists in and for school in Brazil

Beatriz Prado Pereira, Patrícia Leme de Oliveira Borba, Roseli Esquerdo Lopes

Universidade Federal da Paraíba – UFPB, João Pessoa, PB, Brasil.
Unidade Federal de São Paulo – Unifesp, Baixada Santista, SP, Brasil.
Universidade Federal de São Carlos – UFSCar, São Carlos, SP, Brasil.


Abstract

Occupational therapists have contributed and aim to continue creating solutions to problems within the scope of the Education sector. Thus, the objective of this research was to know and analyze the propositions of occupational therapists in Brazil who have been doing for and in School. To this end, a mapping review was carried out in the SciELO library and in the following Brazilian journals: Cadernos Brasileiros de Terapia Ocupacional and Revista de Terapia Ocupacional da Universidade de São Paulo, in an open period until the end of 2018. With this survey and its systematization, 36 texts were collected that articulated “occupational therapy and school/education”. At the same time, during 2017, six interviews were conducted with Brazilian researchers who worked on the interface of occupational therapy and education. The collected data set and its analysis led to the elaboration of four thematic axes that configured and delimited the arguments used to support and problematize therapeutic-occupational propositions in dialogue with the Education sector, specifically in schools. It was evident a prevalence of practices aimed at children with disabilities under an individualized perspective approach and associated with the production of/in health has been evidenced. Simultaneously, there has been an increase in the number of proposition solutions aimed at early childhood education and socially vulnerable youth; notably, those included found in popular and poverty impoverished contexts, outlined in the individual/collective transition. It should be emphasized that the energy to designate education as a particular field of intervention for occupational
therapists, with its methodological approach, technical knowledge, and specific populations, is still under construction in development and in dispute within occupational therapy itself.

**Keywords:** Occupational therapy, School, Education, Mainstreaming, Education; Education, Special.

**Resumo**

Terapeutas ocupacionais têm contribuído e ambicionam dar continuidade à criação de soluções para problemáticas no âmbito do setor da Educação. Assim, o objetivo da pesquisa da qual decorre este artigo foi conhecer e analisar as proposições que terapeutas ocupacionais, no Brasil, vêm fazendo para e na Escola. Para tanto, lançou-se mão de uma revisão de mapeamento na biblioteca SciELO e nos periódicos Cadernos Brasileiros de Terapia Ocupacional e Revista de Terapia Ocupacional da Universidade de São Paulo, em período aberto até o fim de 2018. Com esse levantamento e sua sistematização, foram reunidos 36 textos que articulavam “terapia ocupacional e escola/educação”. Paralelamente, durante 2017, foram realizadas seis entrevistas com pesquisadoras brasileiras que atuavam na interface terapia ocupacional e educação. O conjunto de dados reunidos e sua análise levaram à elaboração de quatro eixos temáticos que configuraram e delimitaram a argumentação utilizada para sustentar e problematizar proposições terapêutico-ocupacionais em diálogo com o setor da Educação, especificamente nas escolas. Ficou evidente uma prevalência de práticas voltadas às crianças com deficiência, em uma perspectiva individualizada e relacionada à produção da/saúde. Paripassu, há o crescimento de proposições voltadas a crianças em geral na educação infantil e a jovens em situação de vulnerabilidade social. Pontua-se que o estofo para designar a educação como um campo particular de intervenção do terapeuta ocupacional, com um recorte metodológico próprio, um saber técnico e populações específicas, ainda está em construção e em disputa no interior da própria terapia ocupacional.

**Palavras-chave:** Terapia Ocupacional, Escola, Educação, Inclusão Escolar, Educação Especial.

**Introduction**

This article is part of the results of research in a doctoral thesis that was dedicated to understanding and analyzing the proposals of occupational therapists in and for the school in Brazil.

Many occupational therapists have related to the Education sector in multiple ways and have chosen the school as a focus of attention for the development of their actions, mainly aiming at the integration and inclusion of children with disabilities and/or with global developmental disorders in the regular education system, both in their first school insertion and in the “exit” of children from specialized rooms and schools and entry into the formal regular system (Lopes & Silva, 2007).

More recently, the Education sector has been recognized as a field of activity for occupational therapists. In 2004, the World Federation of Occupational Therapists published worldwide the document Position Statement - Education Emphasis, and in
Brazil, in 2016, the Occupational Therapy and Education Working Group was created at the IV National Occupational Therapy Research Seminar, organized by the National Network for Teaching and Research in Occupational Therapy, and, in December 2018, the Federal Council of Physiotherapy and Occupational Therapy approved resolution 500, which recognizes and disciplines the specialty of what it called “Occupational Therapy in the School Context”. Both documents and the creation of a workgroup dedicated to the theme of education are based on the principle that occupational therapists have contributed and aim to continue creating solutions to problems in the field of education, school, and the education processes.

Therefore, it is important to discuss the themes when working on the articulation between occupational therapy and education: special education, inclusive education, and public school to understand where and how the work has occurred, its assumptions and contributions theorists, and the possibilities for creating better strategies for professional action.

The triad: Inclusive Education, Special Education, and Public School

There is a consensus among researchers (Lopes & Silva, 2007; Rocha, 2007; Silva & Lourenço, 2016) regarding the historical version that Brazilian occupational therapy entered the Education sector through its insertion in the “Special Education” subarea, which, in turn, was focused on the school inclusion of specific populations, such as children with mental, physical, visual, hearing or developmental disorders (Rocha, 2007; Mendes, 2006).

The works were carried out mostly in specialized educational institutions managed by religious orders with a philanthropic-assistance character (Bueno, 2004) and, in a minority, in the “special classes” integrated into the regular school system, but maintaining the segregation of that people participate in the school space for many years. Furthermore, as Rocha (2007, p. 123) says, the basis of the occupational therapists’ work was “[…] an extension of the clinical activity developed in the rehabilitation services, which sought to standardize behavior, motor-functional performance, and cognitive development”.

In Brazil, the debates around the proposition of inclusive education at the end of the 20th century focused on subjects considered to be the target people of special education over the years. From then on, inclusive education and special education were expressions of concepts referring to the same phenomenon: the defense of the inclusion/insertion of special education students in regular education classes, in ordinary schools (Breitenbach et al., 2016). These schools came to be called inclusive.

However, inclusive education is a proposal for theoretical and practical application in the Education area, arising from a worldwide movement for social inclusion. The struggle is based on advancing education to equal opportunities, the right to diversity and education, among other things, and it is necessary to review the way school and society have been indirectly addressing the issues that even affected but not “only” the target population of special education (Matos & Mendes, 2014), a modality of school education that, in Brazil, started to be offered preferentially in the regular school system (Brasil, 2013).

Although the debate on inclusive education was not born in the context of special education, it was also applied to it as its people are part of the population historically
excluded from school and participation in society more generally. The inclusive education proposal recognizes that the school has caused and enhanced the inequalities associated with the existence of differences in different sectors, whether of personal, social, cultural, or political origin, and in this sense, it proposes the restructuring of the educational system in general, to provide quality education to all children, adolescents and young people, or even adults who have not been able to access it in their time (Ferreira, 2008).

However, the principle of public education for all is not something new since the end of the 19th century, reinforced by the Escola Nova movement, which gained strength in the 1920s, and which, in Brazil, inspired the demands of the so-called Manifesto dos Pioneiros da Educação Nova (Azevedo et al., 1932) (Pioneers of New Education Manifesto) one of the most influential documents in the entire history of Brazilian education, in which a single school for children and adolescents from seven to 15 years old, defining an integral, in charge of the State, lay, and of co-education and public responsibility as principles of a school for all (Saviani, 2014).

In this sense, the perspective of inclusive education completes the principles of the New School and the Pioneers Manifesto regarding the defense of education for all; however, in general, the term or the idea of an inclusive education refers, almost automatically and directly, exclusively to people with disabilities especially children, as if they were in the case of Brazil and also of several other countries the only excluded from and in the formal school space.

Even in this context, the school is present as a necessary and unquestionable asset for most people and societies, able to project in the collective imagination as a right for all (Sposito, 1998; Peregrino, 2005; Pereira & Lopes, 2016), as envisaged by the major Brazilian law and, with that, since the end of the last century, it has reached more universalizing proportions in Brazil. It occupies a central position in the representation of the educational process, including for those who never had the opportunity to access it or remain in it in due time (Lopes & Silva, 2007; Lopes et al., 2011; Borba et al., 2015).

From our point of view, occupational therapy must reflect its participation in this context, considering the access, permanence, and quality of learning of children, adolescents, and young people to/in school education a human and also social right arising of their citizenship, but understanding the school as a space for democratic participation that must also compose a social network of supports (Castel, 1999) and opportunities, enabling the full development of people and citizenship, through a common understanding of a public school effectively for all. Therefore, the big question is how to build a Brazilian public school of better quality for everyone and, at the same time, ensure that the specificities and peculiarities of each individual are guaranteed and respected.

Access to the school is also universal in Brazil and the question raised is how Brazilian occupational therapists are in this social phenomenon and on what assumptions they will propose practices and direct their attention in this field, assuming this space, “the school”, and its processes as being from and for all, including, but not limited to, the target people of special education. These premises guided the methodological path for the composition of the data in this study and supported the construction of its analysis, as will be presented below.
Methodological Path

In the first phase, we pay attention to the academic mapping of the field through publications in Brazilian journals using the terms “occupational therapy” and “school” or “education”, present in the abstract and/or in the keywords and/or in the title, surveying texts in the SciELO library - Scientific Electronic Library Online, in an open period until the end of 2018, bringing together five works.

As it specifically addresses occupational therapy, we also opted to search for texts published in the main Brazilian journals in the area: Cadernos Brasileiros de Terapia Ocupacional and Revista de Terapia Ocupacional da Universidade de São Paulo. Using the same search terms already mentioned, we collected and read all abstracts, titles, and keywords from 1990 to the end of 2018, which resulted in the selection of 31 texts that presented an articulation between school and therapy occupational, and we read them in full. Thus, 36 texts related to the theme were gathered.

The mapping review aims to provide an understanding of the scope of research activity in a given area. We developed this method to map and categorize the existing literature on a particular topic, also allowing the identification of gaps in the research area on a given topic. Therefore, this allows describing a research field (Grant & Booth, 2009).

At the same time, we opted to consult the Portal do Diretório de Grupos de Pesquisa no Brasil – CNPq, characterized as registration of active groups in the country, to raise researchers in the field who were effectively involved in research and academic production in the context of this study (Brasil, 2015). We consulted the portal in January 2017, and we found 57 research groups, using the term “occupational therapy” in the search. After reading the names of the groups, descriptions of their impacts, and the objectives of the lines of research, we selected six groups that presented the interface between occupational therapy and education and/or school. The six groups included a total of 10 leaders or vice-leaders, all women and professors from the area of public universities in Brazil.

Then, we consulted the curricula of these 10 leaders and vice-leaders through the Lattes Platform – CNPq to verify and gather all their productions in different articles, books and/or book chapters, the projects extension, and university research in the topic. In this way, six occupational therapist leaders from the registered groups were listed who dialogued, developed projects and studies related to the theme of education, and had academic production in the area.

After this selection, we invited the researchers to collaborate with the research, granting an in-depth interview via Skype, to dialogue, discuss, question, and reflect on their personal and academic trajectories through occupational therapy, on the way they built the dialogue with education and about their perspectives on the topic. All agreed and we conducted the interviews during the first half of 2017; we sent their transcripts to them for a possible review of the text, with corrections and additions that they deemed necessary and pertinent, following the terms Informed Consent Form (ICF), signed by all, respecting the ethical relationship in the research and with its collaborators.

3Each meeting started with the reaffirmation of the research objectives, presented in the invitation letter sent to the researchers previously, together with the Inform Consent, and with the confirmation of another identification data and contacts. In summary, the items covered in the interview were: 1- academic trajectory in occupational therapy and education; 2- articulation between education and occupational therapy; 3- references for research and practice; 4- therapeutic-occupational practices in education and school. Each of these items had its own ramifications. At the end, the collaborator was also invited to bring other possible comments, questions or observations.
The different methodological procedures used are complementary to unveil the facets of the problem presented here, and the breadth of data extracted from academic productions expands and acquires greater consistency with those arising from the interviews, in the articulation that has been established between occupational therapy and the school, its dimensions and demarcations that are important for this understanding.

In this direction, we organized all material found and produced into four thematic axes to delimit the arguments used by the researchers and the authors of the texts, to support and problematize the proposals of occupational therapy and the dialogue with the field of education in schools, such as we will show it here.

Results and Discussion

Thematic axis I: Social inclusion, school inclusion, children with disabilities and dialogue with occupational therapy

The first thematic axis groups the largest number of texts, 17. Table 1 below shows a discussion about the school inclusion process of children with disabilities, based on an ethical and political position, because of the concepts that permeate the speeches and the practices of occupational therapists in the Education sector. These point to the social integration paradigm as an initial parameter that supports the understanding of social inclusion and school inclusion and, in this direction, turns to possibilities of action by the occupational therapist in and for the school in Brazil.

<table>
<thead>
<tr>
<th>Thematic axis</th>
<th>Title</th>
<th>Authorship</th>
<th>Journal</th>
<th>Year</th>
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<tbody>
<tr>
<td>III</td>
<td>The school inclusion of students with mental disabilities: an intervention proposal by the occupational therapist in the school daylife</td>
<td>Jurdi, A.P.S., &amp; Amiralian, M.L.T.M.</td>
<td>Estudos de Psicologia</td>
<td>2006</td>
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<tr>
<td>V</td>
<td>The multidisciplinary context of occupational therapy practice in the face of the school inclusion paradigm</td>
<td>Toyoda, C.Y., Mendes, E.G., &amp; Lourenço, G.F.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2007</td>
</tr>
<tr>
<td>VI</td>
<td>Teachers’ perception of motor and process skills assessment - school version applied to students with physical disabilities</td>
<td>Baleotti, L.R., Zafani, M.D., &amp; Faria, M.G.A.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2011</td>
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<tr>
<td>VII</td>
<td>School inclusion of students with physical disabilities: contributions of occupational therapy</td>
<td>Paula, A.F.M., &amp; Baleotti L.R.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2011</td>
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<tr>
<td>VIII</td>
<td>Identifying possibilities for occupational therapy in school inclusion</td>
<td>Ide, M.G., Yamamoto, B.T., &amp; Silva, C.C.B.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2011</td>
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<tr>
<td>X</td>
<td>Inclusive education: contributions to the development of an ethical commitment to its effectiveness</td>
<td>Silva, A.C.B.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2012</td>
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<tr>
<td>XII</td>
<td>Reflections on the role of the occupational therapist in the process of school inclusion of children with special educational needs</td>
<td>Trevisan, J.G., &amp; Della Barba, P.C.S.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2012</td>
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<tr>
<td>XIII</td>
<td>The difference in the family context, school inclusion and occupational therapy</td>
<td>Marcelino, J.F.Q.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2012</td>
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<td>XIV</td>
<td>Facilitators and barriers in the process of school inclusion of children with special educational needs: the perception of educators</td>
<td>Oliveira, P.M.R., Dutra, L.R., &amp; Melo, P.P.T.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2015</td>
</tr>
<tr>
<td>XV</td>
<td>Facilitators and barriers in the process of school inclusion of children with special educational needs: the perception of educators</td>
<td>Maia, A., Santana M.R., &amp; Pestana, S.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2016</td>
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<tr>
<td>XVI</td>
<td>Occupational therapy and continuing education of teachers: a strategy for the school inclusion of students with neurodevelopmental disorders</td>
<td>Folha, D.R.S.C., &amp; Carvalho, D.A.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2017</td>
</tr>
<tr>
<td>XVII</td>
<td>Details and reflections on occupational therapy in the process of school inclusion</td>
<td>Simoni, P.F., Maria, M.M.S., &amp; Paula, T.C.</td>
<td>Cadernos Brasileiros de Terapia Ocupacional</td>
<td>2018</td>
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</table>

Composing and deepening the discussion brought by the texts, the researchers Carla Cilene Baptista da Silva\textsuperscript{4} and Eucenir Fredini Rocha\textsuperscript{5} highlighted important reflections for understanding the role of occupational therapists in schools, focusing mainly on issues of inclusive education and with ideas to analyze, compare and reinterpret together with data from academic productions.

Silva (2012), Rocha et al. (2003), and Rocha (2007) are in line with the thought of social psychologist Bader Sawaia, who points out that, depending on the way the school inclusion process takes place, there is a danger of effecting an illusory or perverse inclusion, devoid of what it must substantiate this process: the notion of humanity, the appreciation of the individual, his desires and affections, the consideration of the way he relates to the social, the questioning of suffering, which is directly reflected in daily life, in the capacity for autonomy and the subjectivity (Sawaia, 1999).

Following this perspective, Eucenir Rocha adds:

\begin{quote}
Of course, other authors go the other way and will say similar things, but she [Bader Sawaia] says something very interesting: we have not excluded, we have included it perversely. So, today you have black people, immigrants, poor, disabled people in schools, the school is a space for everyone, but that does not necessarily mean inclusion in the educational process. It can be included perversely, be a place even there that will strengthen, corroborate with prejudiced, stigmatizing processes [...]. So, I think that the occupational therapist who did not realize this did not yet understand what we have to do, not least because the legacy of our profession is to serve certain population groups that were also segregated [...]. We have to be careful not to, through our actions, perpetuate the forms of perverse inclusion. [...] and our work will be very limited if we continue to observe only the specifics. We need to look at it without being through a normative, corrective, adaptation path.
\end{quote}

For Rocha (2007) and Rocha et al. (2001, 2003), it is not possible to discuss the processes of exclusion and inclusion based only on “macro” aspects of the problems such as laws, public policies, social organizations, among others. We need to introduce ethics and subjectivity in the analyzes. Thus, the stories of individuals or social groups that experience in daily life and the present, situations of suffering, abandonment, discrimination, injustices in various modalities and configurations of exclusion, such as “[...] political disengagement with the suffering of others” (Sawaia, 1999, p. 8).

Only the enactment of laws does not guarantee school inclusion since the exclusion mechanisms are visible in schools such as architectural barriers, lack of adapted furniture, absence of help equipment, and teaching materials suitable for different difficulties (visual, auditory, cognitive, and motor skills), absence of sign language or Braille writing, or obstacles that are not always evident, such as attitudinal barriers (Rocha et al., 2003; Toyoda et al., 2007).

Taking this perspective, the authors understand that the action of occupational therapists at school “[...] is not clinical, nor focused on specific aspects of students with

\textsuperscript{4}Professor at the Department of Health, Education and Society at the Federal University of São Paulo (Unifesp) and leader of the Research Group “Occupational Therapy in Education”, since 2016.

\textsuperscript{5}Professor at the Department of Physiotherapy, Speech Therapy and Occupational Therapy at the Medical School of the University of São Paulo (USP), leader of the REATA Research Group - Laboratory of Studies in Rehabilitation and Assistive Technology at the Medical School of USP (FMUSP), since 1997.
disabilities, nor on convincing correct attitudes and, much less directed at reviewing pedagogical issues" (Rocha, 2007, p. 75). The whole school is needed to develop an inclusive education project with the responsibility of everyone, including the occupational therapist, with what they do (or fail to do), with the opportunity to exercise and value the school’s autonomy for action processes - reflection-action that requires everyone’s participation.

On the “clinical” work inside the school, Carla Silva also reports:

[...] we [occupational therapist] look a lot at building the space, the equipment, or the institution, wherever you are; and it is not there [school] that we have to work on health issues [...]. One thing is, when occupational therapy within the school or any health professional, he has to be clear to make a treatment, to act specifically with an issue that has to do with rehabilitation, which can be composed of going to school, but the treatment itself, it is out of school. The school can be an extra piece of equipment to be worked with that child so that she can integrate [...]. But at school, we have to look at what is the potential of this child and that context must be able to as a more inclusive approach possible.

Thus, we are based on the conception of quality education for all, respecting the diversity of students. This implies facing the differences and the learning needs of each individual, but that, equally, demands the promotion of social and educational changes, abandoning practices only centered on individuals and promoting collective actions such as the creation of strategies, proposals, and methodologies involving different actors in the school community who seek a common goal or set of objectives and enable the construction of the desired practice.

The different possibilities of intervention in the occupational therapy area such as the use of assistive technology and the introduction of supplementary and alternative communication, actions in group dynamics, activity workshops, films, reading of texts, as well as the analysis of activities, the facilitation of activities of daily living (ADLs), environmental adjustments, equipment and furniture, referral to health and rehabilitation services (if necessary), guiding and referring family members to services that provide assistive equipment, such as orthoses, prostheses, and wheelchairs, among others, are possible strategies for this dialogue (Rocha et al., 2003).

There are specificities in the condition of disability that interfere and hinder the teaching and learning process, under normative parameters. In this sense, for Eucenir Rocha, the role of the occupational therapist in the school inclusion process takes place to equip the teacher with knowledge and skills, aiming to strengthen the action of the educator, the student, and everyone involved, promoting solutions to the impasses, based on the group, with the use of different resources, adaptations in activities appropriate to the needs of each reality, guiding more collective actions, but not making individual demands disappearing (Rocha, 2007).

Despite the differences and due to its history and hegemony, this axis together with Axis II ends up constituting what an occupational therapist is expected to do at school, based on the resources and activities mentioned above and limited to the attention to children with disabilities. This expectation can be extended, as long as we recognize the existence of other propositions around other target audiences, as described in Axes III and IV.
Thematic Axis II: Resources and devices for the practice of occupational therapy at school

The second thematic axis brought together seven texts that addressed resources and devices for therapeutic-occupational practice in the school environment, within parameters of school inclusion of special education, shown in Table 2.

Table 2. Thematic Axis 2 references, in chronological order of publication.

<table>
<thead>
<tr>
<th>Title</th>
<th>Authorship</th>
<th>Journal</th>
<th>Year</th>
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<tbody>
<tr>
<td>The role of the occupational therapist in assistive technology</td>
<td>Pelosi, M.B.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2006</td>
</tr>
<tr>
<td>The joint action of health and education professionals in the inclusive school</td>
<td>Pelosi, M.B., &amp; Nunes, L.R.O.P.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2011</td>
</tr>
<tr>
<td>Collaborative consulting in occupational therapy for teachers of preschool children with low vision</td>
<td>Gebrael, T.L.R., &amp; Martinez, C.M.S.</td>
<td>Revista Brasileira de Educação Especial</td>
<td>2011</td>
</tr>
<tr>
<td>The therapist’s performance in the school context: the use of assistive technology for students with cerebral palsy in early childhood education</td>
<td>Rocha, A.N.D.C., &amp; Deliberato, D.</td>
<td>Revista de Terapia Ocupacional da Universidade de São Paulo</td>
<td>2012</td>
</tr>
<tr>
<td>Use of assistive devices by students with disabilities in public schools</td>
<td>Plotegher, C.B., Emmel, M.L., &amp; Cruz, D.M.C.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2013</td>
</tr>
<tr>
<td>Occupational therapy and assistive technology: reflections on the experience in school collaborative consulting</td>
<td>Baleotti, L.R., &amp; Zafani, M.D.</td>
<td>Cadernos Brasileiros de Terapia Ocupacional</td>
<td>2017</td>
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We bring excerpts from the interview with Miryam Bonadiu Pelosi⁶ to compose the conversation about the assistive technology resource, with an important trajectory in this

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⁶Professor, Occupational Therapy Department, Federal University of Rio de Janeiro (UFRJ), coordinator of LabAssistiva Laboratory and leader of the Research Group “Occupational Therapy and Assistive Technology in different contexts”, since 2016.
area in Brazilian occupational therapy, addressing the inclusion of the child with disabilities mainly, and specifically, the use of technologies, adaptations and forms of alternative communication for the access and permanence of these children in schools.

Among the most mentioned existing resources, there are collaborative consulting (Gebrael & Martinez, 2011; Della Barba & Minatel, 2013) and assistive technology (Pelosi, 2006; Pelosi & Nunes, 2011; Rocha & Deliberato, 2012; Plotegher et al., 2013). The texts problematize and reflect on both, considering this performance as an interface between health and education, and argue that through them, there is the contribution of more specific knowledge of the occupational therapist (Gebrael & Martinez, 2011; Pelosi & Nunes, 2011; Rocha & Deliberato, 2012; Della Barba & Minatel, 2013).

As possibilities for action, we stand out: adaptations of school material; use of resources and visual cues (illustrative figures), helping the organization and orientation of the student regarding time and space; strategies for a school activity, as to how to offer, guide and conduct it; flexibility of the curriculum, in the sense of expanding the form of assessment to understand the acquired and perceived learning; ways of coping with difficult situations (such as the student’s discomfort with some sounds), among others (Della Barba & Minatel, 2013).

For Gebrael & Martinez (2011), the participation of professionals outside the school (understanding the occupational therapist as one of these professionals) provides exchanges of knowledge and partnership. Furthermore, we believe that it is possible to contribute to various aspects of school inclusion of students targeting special education. The occupational therapist is a partner for the development of the work, by proposing resources, strategies, and adaptations.

Miryam Pelosi considers and highlights the need for the occupational therapist to assist teachers and other members of the school and also family orientation to understand the demands of students, their powers, and limitations in carrying out activities at school. The contribution of occupational therapy to the field of Education would cross all levels of education, but would mainly focus attention on children, as expressed:

The first one is the accessibility of the space, which does not necessarily involve the construction of ramps, but how the school spaces and the room can be organized to receive children considering their visual function, their hearing ability, their way of moving around on foot or with the help of a walker and/or wheelchair. Also, the accessibility of the activities that involve the font, the size, the contrast between the text and the paper sheet, the number of information per sheet, the use of simple texts and contextualized with the Brazilian culture, the use of direct questions, the fragmentation of more complex activities into stages.

In this sense, the authors think that assistive technology improves the insertion and participation of children as it involves areas such as alternative and expanded communication, alternative mobility, adequate positioning, access to the computer, accessibility of environments and adaptations to activities of daily life, transportation, leisure equipment and pedagogical resources (Pelosi, 2006; Pelosi & Nunes, 2011; Rocha & Deliberato, 2012).

Assistive technology is a resource used within the practice of the occupational therapist at school and cannot be understood as its only possibility. There is no doubt about the benefits
that this resource provides to education, although it is considered necessary to place it in a larger perspective, mainly evaluating the context of its use, as Miryam Pelosi points out:

*The occupational therapist understands the role of the activity as a therapeutic resource and that activity can be an activity performed in any context. He knows how to assess the needs and potential of the individual, he knows the different pathologies. If the context is an important aspect to be considered, the occupational therapist will understand that he will need to know him better to perform his actions at school. To work at the school or provide guidance and interventions in this context, the occupational therapist will need to understand how the educational system in Brazil works, the resolutions, especially those related to national guidelines on inclusion and the rights of people with disabilities. He will need to know the activities that are developed at school in different segments, such as daily routines, the literacy process, the child's cognitive development, among other concepts.*

Assistive technology is strengthened so the support becomes necessary to implement the paradigm of inclusion in school and of a “society for all”, facing prejudices in which practices and discourses place on people with disabilities. However, technological resources are neither facilitators nor hinder the processes of social inclusion, satisfaction, and personal fulfillment and social groups, nor promoters of independence and autonomy. Therefore, it is necessary to reaffirm the need for approaches that consider the aspects present in the life stories of people with disabilities, the meanings that the equipment or the lack of access to them has for these people, the social, educational, and politicians present (Rocha et al., 2001).

Although these resources were mentioned in this axis, they can also be found in the works of Axis I. However, the authors and researchers have a concern around the creation, application, and evaluation of the referred resources, gaining this centrality in their research and/or projects.

If the assistive technology is understood not only as the set of resources that contribute to provide or expand functional skills but also the various services, strategies, and methodologies that are implemented, together with the resources to meet the real needs for autonomy and participation of women, there is a need to shift from a link to the clinical-functional model of disability still restricted to the individual sphere of adaptation, for a social understanding of educational issues that should be thought in more collective actions.

However, we need to move forward in the application of public policies that meet and respect the specificities of the target people and also to move forward in the implementation of specific measures of attention to diversity since the great and important barriers are often in the lack of knowledge of technological resources, in disrespect to legislation and, mainly, in the way society is organized, which ignores the different demands of its population.

**Thematic Axis III: Child education, child development and its interface with occupational therapy**

The third thematic axis grouped seven texts. Table 3 shows the theoretical references related to child development studies⁷, which will support the authors’ justifications

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⁷The texts can bring discussions and themes that go through the other axes but in this systematization, they were grouped considering their main discussions and theoretical/conceptual contributions.
regarding the difficulties and dilemmas of the schools with their people and point out the problems existing in the school and the dialogue with occupational therapy.

Besides the texts and trying to compose and advance the discussions presented by the academic productions, we listed in this axis the collaborations of two researchers, Cláudia Maria Simões Martinez and Fabiana Cristina Frigieri de Vitta, who bring a dialogue in their proposals and reflections, mainly based on the understanding and correlation of child development with occupational therapy and the insertion of this professional in schools.

Table 3. Thematic Axis 3 references in chronological order of publication.

<table>
<thead>
<tr>
<th>Title</th>
<th>Authorship</th>
<th>Journal</th>
<th>Year</th>
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<tbody>
<tr>
<td>Portrait of a daycare center: possibilities for occupational therapy performance in early childhood education (0-2 years)</td>
<td>Carrasco, B.G.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2005</td>
</tr>
<tr>
<td>Contributions of Occupational Therapy in the process of training of baby educators in daycare centers</td>
<td>Martinez, C.M.S., &amp; Neótiti, C.C.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2007</td>
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8Professor in the Department of Occupational Therapy at the Federal University of São Carlos (UFSCar) and leader of the Research Group “Promotion of Child Development in the Context of Family Life and School” since 2007.
9Professor at the Special Education Department at State Paulista University Júlio de Mesquita Filho (UNESP) and coordinator of the Study and Research Group on Child Development and Activity - GEPADI since 2012.
The focus of the discourse on this thematic axis goes in the direction of understanding that early childhood education, more precisely the daycare center, needs to be considered in the context of Brazilian basic education, and that, when reflecting on the role of this institution, its contributions and limitations for the child education, the institutional view and common sense are more linked to issues of care than to teaching, and that the educational environment and its processes in many moments are not valued as important issues for the development of all the children.

Leaving the superficiality of understanding this scenario requires education researchers and occupational therapists to explain what the role of pre-school education should be in the formation and promotion of children’s human development. We need to bring to the agenda the way how the care is understood and what is meant by education/educating, and that both are inherently interlinked dimensions and, perhaps, inseparable from the point of view of pedagogical practice.

The authors of the scientific productions and the researchers highlighted that preschool has a fundamental role in the child development process as the first environment, outside the family scope, which welcomes and introduces the child to the sphere of social relationships. For this very reason, the first experiences lived inside will be essential for the construction of how this individual is placed in the world, in relationships with others, and in the face of knowledge and the creative act, that is, “[...] education as a promotion of the development of the human being” (Fabiana de Vitta).

Thus, Jurdi et al. (2004, p. 27) point out that the “[...] partnership with the field of education has enabled [occupational therapists] to provide actions focused on the issues of everyday school life” and based on the requests brought by the teachers, such as the difficulties experienced in the everyday life, the doubts about the children’s universe, its development, learning difficulties or even questions related to proposed activities that could modify conventional practices, and, therefore, occupational therapists need to deal with the need for more effective practices that address these demands.

The texts report that in the context of daycare centers, educators should deepen their knowledge about child development and the factors that fall on it, allowing them to intervene with children in their daily lives, minimizing or even eliminating negative influences and/or enhancing positive aspects, and the fundamental role in identifying possible “delays” in children’s development (Martinez & Neófiti, 2007; Moreira et al., 2014).

Fabiana de Vitta argues that the understanding that occupational therapists develop in the activities is essential and specific to this profession, especially in the age group of children in the nursery; we need this understanding to collaborate with education in guiding professionals, what she calls “decomposition of the activity”, bringing as an example:

> So, for example, all nurseries put children to eat [...] Everyone knows how to feed the baby, [...] but when this baby is eating comfortably, what is he
learning? He is lying down, he is not learning to hold sitting, food would be a great stimulus for head control and he cannot do this, he cannot see. The nursery professional stands up, he can’t see the nursery professional in the eye, so how do we change it? So, the comfort baby has to stand as much as possible, and still, he is very lying down. Ah, so let’s adapt this baby comfort, how can we adapt this baby comfort? You have to put baby comfort on the table, you will be able to sit in a chair and keep your eye at the same height as the baby. This is all about occupational therapy.

In the same direction, Cláudia Martinez understands that occupational therapy has a technology that is often translated by the “look of occupational therapy” and that is developed through the analysis of activities, reporting:

> When the occupational therapist uses an activity, he can consider elements such as intensity, rhythm, relevance in his analysis; he looks at various attributes of a given activity for a person’s situation in a given context. And then, he can do this same exercise for the group situation, and he can do the same exercise for a collective situation. So, what I perceive, occupational therapy in this context of child development, occupational therapy works - or should work - in partnership with teachers, with the area of education and other sectors that are present there, to be able to notice the adequacy and the benefit or non-benefit of certain activities in the daily lives of these people.

Based on this understanding and the development of the texts, the importance of occupational therapy for the training of educators and early childhood education professionals was discussed for the proper stimulation of children who attend these spaces, providing subsidies for a better understanding of the relationship between daily activities and child development.

The action of the occupational therapist in preschool brings important contributions to educators: in the processes of prevention of developmental disorders and the proposals for stimulation, early intervention, with the use of assistive technology, consulting, guidance resources to caregivers and families to facilitate the family-child-educator relationship (Martinez & Neófiti, 2007; Moreira et al., 2014).

In general, the texts and interviews reveal concerns that go through the issue of the environment and the physical structure of early childhood education institutions, the games and recreational activities that are developed (or not) in these spaces, the relationship that is built between the child and the teacher, and the importance of training these teachers and educators. However, these problems appear with greater support in the perspective of developmental and school psychology, justifying the actions taken by occupational therapists by this theoretical reference.
Thematic Axis IV: Childhood, adolescence, and youth people in situations of social vulnerability, public school, and occupational therapy

Table 4 shows the fourth and last thematic axis with five texts. It starts from the understanding of childhood, adolescence, and youth people in a situation of social vulnerability, to problematize the current public school and also recognize demands and formulate action proposals for occupational therapists in that context.

In addition to the selected academic productions, the researcher Roseli Esquerdo Lopes was listed to participate in the interview as she is one of the main authors of this axis and who has dedicated to the discussion of occupational therapy and the school, especially the Brazilian public school, scoring it as social equipment that will compose the social support network (Castel, 1999) for childhood and poor youth people.

The studies problematize education in Brazilian public schools and are based on several authors in this field of knowledge, who point out problems in the current educational situation, such as access, permanence, and effective learning of students, to score demands and proposals within the scope of occupational therapy. Despite having been carried out by a Brazilian researcher, only one of the works was developed in a school in Mozambique, bringing a political panorama of the situation in that country and the education system, reflecting on school practices, and the interpretation of children, parents, and teachers about training processes (Pastore & Barros, 2018).

Table 4. Thematic Axis 4 references in chronological order of publication.

<table>
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<tr>
<th>Title</th>
<th>Authorship</th>
<th>Journal</th>
<th>Year</th>
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<tbody>
<tr>
<td>“Today at school we are talking about vulnerability”: contributions from occupational therapy in the process of continuing teacher education</td>
<td>Gontijo, D.T., Marques, E., &amp; Alves, H.C.</td>
<td>Cadernos de Terapia Ocupacional da UFSCar</td>
<td>2012</td>
</tr>
<tr>
<td>Experiences and perceptions about education in Mozambique: Ethnographic views in a primary school in the neighborhood of Matola AA</td>
<td>Pastore, M. N., &amp; Barros, D.D.</td>
<td>Cadernos de Estudos Africanos</td>
<td>2018</td>
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</tbody>
</table>


10Professor at the Department of Occupational Therapy at the Federal University of São Carlos, coordinator of the METUIA Laboratory and leader of the Research Groups: “Citizenship, Social Action, Education and Occupational Therapy” since 1999, and “History, Society and Education in Brazil: HISTEDBR/UFSCar ” since 2004.
Regarding the Brazilian public school, despite the expansion in guaranteeing access to school, the permanence, progression, and completion of the school level in the expected age group is still an important problem not solved in the country. Therefore, we should discuss quality in the teaching-learning process, which can be configured in many cases, as school dropout, decreased opportunities for inclusion in the labor market, and increased social injustices (Lopes et al., 2011; Gontijo et al., 2012).

The dialogue between the different sectors to guarantee full citizenship would make it possible to build a set of integrated actions, capable of responding more efficiently to the challenges posed to society and education. In this sense, Roseli Lopes reports that, based on experiences and research carried out, they gathered materials that expose this articulation, allocating the school as an essential place for the composition of that network:

[...] placing a concern around how to compose a social support network that is necessarily intersectoral, which needs health, education, elements of culture but also what guarantees the dignified life of young people, children, in terms of housing and transportation so that they can circulate, but taking the focus and giving visibility and placing a very large lens around the place of the school, for this, to compose this network.

Therefore, we can infer that no sector in services and social policies can apprehend the diversity and the number of tensions that are established in the social area and in its relationships in an individualized way. For this reason, there is more and more talk of the need for constructions in the social space of coexistence and intersectoral policies, which articulate joint actions between different levels of government, between different social segments, to solve the challenges we face in the school.

Thus, they also understand the occupational therapist as a social articulator, which implies reflecting and dealing with three domains: the macro-structural and conceptual, the political-operational and that of personal and collective attention that interpenetrate in daily life, composing the dynamics of professional reality to which social occupational therapy is affiliated, to a practice based on intersectoriality and founded on transdisciplinarity (Galheigo, 1999).

Thus, with the focus of attention on students and based on the theoretical-methodological assumptions of social occupational therapy and the reflections of educator Paulo Freire (1978, 2005), two of the studies (Lopes et al., 2011, 2013) reported experiences of therapeutic-occupational performance in the public school with the proposition, together with young people in high school, of what they called Activities, Dynamics and Projects Workshops (Lopes et al., 2011, 2014).

Through the activity, closer contact with young people is possible, enabling to apprehend individual and collective needs, by accessing the immediate universe and the demands of the subjects involved, significantly increasing the possibility of creating bonds, which creates opportunities for professional action that contributes to the joint construction of life plans and projects. The Workshops also promote greater contact, the
coexistence between the participants and provide the experience of a pleasant space of sociability (Lopes & Silva, 2007; Lopes et al., 2011).

We reflect on a school that is established (or should be established) as a favorable space for social coexistence, especially nowadays when the universal access has placed poor children and young people in public schools, and especially in the peripheries of the cities, where these children and young people reside, in which there are few spaces, or difficult to access, that enable and value this. Society demands that the school perform this function more, based on the principle that living together requires respect and coherence, therefore, a demand for the work of occupational therapists at school, as stated by Roseli Lopes:

"[...] there are some things in which we have more information, which could, from the field where we are, inform the school; facilitating the processes of coexistence at school because the occupational therapist knows, reads about these processes that the school does not have and that this demand may not appear, “help us to live better”, for example. Now, coexistence in a respectful way, in the broad sense of respect, in the sense of Sennett [2004] for self-respect and mutual respect, respect that does not humiliate; humiliation is a process that is present at school, from the point of view of boys and the point of view of teachers, often also of managers.

The proposal would be to demonstrate the professional occupational therapist as someone who can facilitate and help with actions that do not try to keep the school “only” as a place for disseminating and teaching knowledge but to idealize and offer a school in which the heritage of knowledge accumulated human being is available in spaces of experiences that value the individuals and where there is a coexistence between differences, the sharing of cultures, the encounter, the solidarity between people and their formation, so that each individual can objectify as a full, historical and social human being (Moura, 2013), who can build, who can create.

In the material gathered in this axis, in addition to the predominance of propositions around the adolescent and young population, since, although existing, they are comparatively restricted to approaches aimed at small childhood, there are no specific mentions for people with disabilities and/or global developmental disorders, even among young people who face these conditions.

There is the defense of radical school inclusion, that is, that inclusion can be predicted and carried out for children and young people with disabilities, but also for those who are devalued by school culture and/or prevented from enjoying it. Occupational therapy develops and creates strategies and technologies for a full radical process of inclusion of those who are expelled from schools daily and that the school was unable to accept and teach.

Conclusions

The literature review linked to the considerations of the research experts in the field in Brazil offered subsidies that configured the four thematic axes through which
the constitution of proposals for occupational therapists for the Education sector was outlined, highlighting those that happen at school or are related to school-based on other sectors of social public policies.

We highlight the limits of the research since it took “only” the scientific publications and the perspectives of six researchers as sources. We also need to show that any proposal for the creation of analytical categorizations can, despite contrary efforts, reduce and restrict how a field’s practice and reflections take place in its complex and concrete reality.

However, the research findings allow producing some syntheses. We perceived that the hegemonic perspective of this field has been placed in the construction of childcare processes related to issues arising from disability, shaped by the practice of health care, with individual care mechanisms and a dual relationship in the “therapist-patient” model (Ghirardi, 2012), within school institutions, even though this perspective is not presented by most of the researchers who were interviewed.

This centrality is explained because most occupational therapists initially entered the Education sector via specialized institutions, where children with disabilities are located (or, in part, still are). When regular schools are oriented/led to receive and provide conditions for people with disabilities to exercise their right to regular school levels and to live together at school, the occupational therapist also goes to regular schools. Then, the school is characterized as a context of academic and professional practices, a context in the sense of an aspect that “affects” the lives of people who are accompanied by occupational therapists. In other words, the focus of the intervention of occupational therapists is not the school or its processes, it is not the school community, but certain groups and individuals who are there or those with whom “school inclusion” is defended.

However, if occupational therapy proposes practices in and for the school, we need to consider such notes since it is necessary to understand the relationships that permeate the individual meaning of the people involved, but also the collective processes, which are historical, political, economic and social, so we can have a real apprehension of how the school is of its demands and of what the professional could collaborate to be and remain in school institutions.

Despite the majority and also important attention to childhood and disability issues, particularly in Brazil, there was an investment in practical experiences and in the production of knowledge that young children and young people are poor youth people.

With young children, we can observe an entire basis in the theoretical contributions of child development psychology, unfolding in actions in schools through early stimulation interventions, using individual and collective strategies to transform physical and relational environments that promote the participation of children and, equally, strategies for the continuing education of teachers/caregivers in early childhood education.

Paripassu, the concern around the elaboration of proposals focused on youth and the whole situation of social vulnerability that accompanies certain ways of being
young, youthful conditions inscribed in poverty and in the processes of marginalization that hinder progression and permanence in public schools, has a whole theoretical-practical reference so that practices can be reproduced, integrating interventions in individual-collective traffic at different levels, with different people: the students, the teachers, the managers and the school community with its surroundings (Pan, 2019).

Thus, we think it is pertinent to assume the possibility of extension of the role of the occupational therapist in schools, defending the need for change and/or insertion of theoretical references they have, so that it is possible a greater understanding of school issues, to participate in the task of promoting inclusion and including everyone who is outside, or is daily “invited to leave” these spaces, in defense of an expansion in the ways of welcoming everyone.

Taking the axes, we can allude to the various sub-areas of occupational therapy in which the occupational therapists will apprehend the issues that seem their own, to elaborate and propose actions in and for the school: occupational therapy of the child development, assistive technology occupational therapy, primary health care occupational therapy, social occupational therapy, occupational mental health therapy, and mental health promotion at school, which have different approaches and ways of reading and interpreting individuals’ needs in the school context.

The way to designate education as a particular field of intervention for the occupational therapist, with its methodological approach, technical knowledge, and specific populations for carrying out its work, is still under construction and in dispute within occupational therapy, running the risk of restricting the possibilities and potentials of this professional to contribute to the Education sector when limited to the care of children with disabilities.

On the other hand, we could apprehend that the speeches of the researchers in the interviews advance in terms of less “clinical” propositions when compared to what we registered and captured by academic productions so far. Each one tells what they do, taking their individual and academic trajectory in occupational therapy and education, articulating the dimensions and demarcations that are important for this understanding.

They bring to occupational therapy a field of knowledge and practice, which is being defined and elaborated by certain objects of personal and collective interests, certain singularities, and peculiarities that point to confluences and/or divergences related to the theories, methods, and models used. The arguments are defended and are configured based on what each one believes to be relevant, within its theoretical-practical construction, within the limits of the cuts made.

In this sense, the consolidation of a field of practice and/or science needs to be further discussed by the category and with its professional partners, who are also dedicated to the construction of an inclusive school. This dialogue must be embodied in academic and/or scientific productions.

The school is the scene of several struggles: people with disabilities, with gender, ethnicity and race diversity, social inequality, the issue of violence, and others. Thus,
occupational therapy could turn to the school, understanding it as a place where social problems are also present and interfere in daily dynamics, requiring theoretical and methodological contributions from education to understanding its processes.

Finally, we consider that we have a moment for the transformation of ideas, that it is necessary to apprehend the teaching and learning processes and the role of the school in a different way for the human formation, being aware of the limits of the school, but acting on the possibilities and demands that it and the individuals who are in it, and/or who want/should be in it, present it to occupational therapists.

**References**


Author’s Contributions
This paper contains data from the doctoral thesis of the first author, under the supervision of the last author. Beatriz Prado Pereira performed the collection, organization, data analysis, and initial writing of the text. Patrícia Leme de Oliveira Borba contributed to the discussion of the data and the writing of the text. Roseli Esquerdo Lopes was responsible for guiding the research and contributed to the writing of the text. All authors approved the final version of the text.