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Geography and Inclusive Education: Demands and Challenges in the Production of Teaching Materials for the Teaching of Visually Impaired People

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Abstract: This article tries to treat alittle, in the form of a small essay, about what is perhaps one of the greatest concerns and challenges in the current context of geography teaching, where the exercise of teaching, increasingly complex, requires the constant search for paths that consider differences in its various nuances, providing the knowledge to which everyone is entitled. The concept of inclusion, it is believed, permeates meanings such as recognizing, understanding, encompassing, being part of and making it belong, which requires changes in relation to teaching and the conception and production of didactic resources. Geography, a science that can be understood first of all as a special way of thinking, enables, through various resources, to understand the spatial reality produced in society, it is thus essential in inclusive education. The objective of the research involves briefly analyzing the possible demands and challenges in teaching blind or low vision students, from the specialized teaching materials used in the teaching of geography at the Benjamin Constant Institute (IBC), Brazil, for the construction of a teaching and learning process that is inclusive and at the same time awakens attention to the importance of geographical science. The study is characterized by being qualitative, with theoretical support in authors of the literature on the theme of teaching and inclusion, supported by an analysis of the general conditions of design and production of teaching materials for the teaching of geography at IBC.

Key words: inclusion, teaching, geography, visual impairment

1. Introduction

The education and teaching of geography are linked to the society of which they emanate and are part, to the extent that they seek to meet goals and objectives established by this society. Therefore, we cannot think about the current education and geography teaching disconnected from the idea of inclusion, a theme that is increasingly present in the debates of contemporary society. Recognizing that the concept of inclusion is something that involves several issues, and is still under construction, this small text tries to briefly address one of its aspects, which involves the teaching of people with visual impairment. Thus, the article seeks a quick analysis of some demands and possible challenges in teaching blind or low vision students, from the specialized teaching materials produced and used in the teaching of geography at the Benjamin Constant Institute (IBC), Brazil, for the construction of a teaching and learning process that is inclusive and at the same time awakens attention to the importance of geographical science. Structurally, the text is divided into three brief moments: first seeks to establish an understanding of the idea of inclusion; in a second moment we try to think about the importance of geography in the context of inclusive education; and in the third moment there are some points considered essential in the conception and production of teaching materials for the teaching of geography to students blind or with low vision, based on the experience and activities developed at IBC.

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2. The Idea of Inclusion: Include Who? Include in What?

Inclusion is a theme/idea that has been debated more intensely in various fields of knowledge in the last twenty or twenty-five years, even if a clear definition of what it actually means has not yet been reached. An approach brought by Sassaki (2010) [1] proposes to understand inclusion as a set of processes and actions where society, or at least part of it, recognizes and seeks to create favourable conditions for people with special needs to be able to prepare to exercise, on equal terms, roles and social functions, participating actively and permanently in activities, debates and constructions in the social future. Such a proposal alone already has a huge challenge, which is to recognize the idea that humanity is diverse in its possibilities and potentialities, which may not be as easy as it seems, as it involves the reconstruction of values, knowledge, customs, habits and thoughts. As Callai (2016) [2] said, it's other people, other landscapes, other looks, other looks, and it's up to us to see.

However, it is understood here that the idea of inclusion becomes a theme for everyone, regardless of gender, ethnicity, age, income, culture or whether or not it presents any special need. This perspective sees inclusion not only as a mechanical-functional participation in society, but above all as the creation of possibilities for an effective and autonomous participation in urban-metropolitan social life, related to the condition of citizenship and appreciation of the collective role that each individual can have in society, ratifying and valuing their differences.

Broader issues thus permeate what is called an Inclusive education, in view of the fact that it encompasses not only people with some disability, but all the strata of a society that wants to be inclusive and equitable. As Mantoan (2000) [3] said, the idea of inclusion can be a revolutionary concept, if it is applied to all those who are incapacitated, for various reasons, to act and interact with autonomy and dignity in the environment in which they live.

If we live in a world where there is not only one truth, but several truths, then we must open ourselves to those truths, recognizing our limits on perceaving them and our obligation as educators to create conditions for them to appear and develop.

3. Geography and Inclusive Education: Possible Relationships

The first two decades of the 21st century have been for geography, as well as for many other areas of knowledge, a period of intense epistemological rethinking. For Ribeiro & Machado (2016) [4], it is a question of thinking about a new proposal that helps in the construction of a world that shelters diversity and where there is autonomy, mobility, freedom and justice, where many worlds fit, *perhaps many* truths (emphasis ing *ours)* .

Thinking about geographical space becomes an issue directly linked to the desire to build a social relationship that has inclusion as a guiding axis, "going far beyond the desire to make only war, politics and the economy". It would be a bit like Ribeiro & Machado (op. cit), not only the economic inclusion of a portion of society, but an inclusion in a broader sense, whether educational, social, cultural, autonomous, etc.

The Geography, by the foundations and principles by which to try to address and address reality, it can permeate various fields in the sphere of what is called inclusion, such as equity, cohesion, citizenship, cooperation, autonomy and above all education. The thought of MASSEY (2009) [5] signals us in much this possibility, conceptualizing the space as something open, relational and multiple, unfinished and in permanent becoming, that for the author it is a condition for the story to be opened, including for new political possibilities.

In this perspective, the possibilities of inclusion are expanded from the teaching of geography, from a myriad of factors arising from its basic foundations

(territory, region, place, landscape), that can contribute to a citizen and autonomous formation. Perhaps this is one of the reasons why Carvalho (2004) [6] believes it is naïve to imagine that the inclusion proposal is intended only for special education students. Ribeiro & Machado (op. cit.) accompany the author, saying that it is naïve to believe that school geography has no duties in the face of different inclusive demands in our society.

The Geography, as a science that excels in the formation of people aware of their active participation in the production of space, through education, it is an undoubted condition in the construction of an inclusive context, context that, according to Ribeiro & Machado (op. cit.), should contemplate not only those who have special needs, but any and all needs.

Nothing is perhaps more appropriate to express the relationship of geography teaching with the idea of inclusion than Kaercher's thought (2003) [7], for whom the main task of a geography teacher is not to teach geography itself, but to highlight a commitment that goes beyond geography itself, strengthening ethical and democratic values and expanding more and more respect for others and what is different, is diverse, another possible.

From the brief reflections traced to here, we make a small effort to think about some initial aspects that are believed to be present in the design and production of teaching materials for the teaching of geography for students blind or with low vision, capable of contributing to the construction of a teaching and learning process that is inclusive and at the same time awakens attention to the importance of geographical science.

4. Geography Teaching for Blind or Low-Vision Students at the Benjamin Constant Institute: Demands and Challenges in the Design and Production of Teaching Materials for Inclusive Teaching

The Benjamin Constant Institute (IBC) was founded in 1854 and is headquartered in The City of Rio de Janeiro, Brazil. It is a national reference institution that develops research activities, extension, teaching, rehabilitation and ophthalmologic assistance for people with visual impairment. It operates at the levels of elementary, secondary and higher education, in addition to offering several extension courses annually. The geography teaching team of the IBC has as attributions to carry out research activities, teaching, extension and production of specialized teaching material for the various levels of education.

Educational resources such as maps, mock-ups and tactile graphics, as well as books adapted in Braille, sound and visual features, among others, are used in many teaching activities at IBC, in a classroom that has visually impaired students, or even multiple disabilities, which greatly complicates the teaching work. The teacher is required to have a careful analysis of what will be taught, what needs to be taught, to whom it is intended, what topics and questions each material can refer to and how these themes and issues will be conducted. These points are basic and usually serve as an initial reflection that precedes the production process of specialized teaching materials for the teaching of blind or low-vision students.

In order to bring some ideas, from the experience and observations in the classroom in the last five years of teaching for students with visual impairment, with the IBC Geography team, the following is what is considered to be some initial demands and challenges in the process of conception and production of specialized teaching materials, within the perspective of an inclusive education.

1) Collective performance of the geography team: this is the initial moment and one of the most important of the design of a didactic material. A collective thinking is extremely necessary in a complex environment such as teaching for people with visual impairment, where not all data is easily captured. The greater the collective work, the greater the chances of producing a more comprehensive, efficient material

that meets different difficulties of the students.

2) Know the different degrees of visual impairment: this point is important in the production of material, as it facilitates in the choice of products, colors, overlays, textures, sounds, dimensions, amount of information etc., in addition to thinking also which sense(s) (sound, olfactory, tactile) will be more activated(s) with the application of the material.

3) Multidisciplinary approach: it is of fundamental importance that the material to be produced (provided that the degrees of disability of the students for which they are intended are known) facilitate the relationship with various areas of knowledge, relacionando-as e favorecendo o levantamento de questões, in order to have a more complete view of the processes that act in the production of geographic space, arousing the interest of students by geography.

4) Preparation and application of materials from an inclusive education perspective: it is necessary that the teaching materials are thought and applied in conjunction with the contents of the curriculum, complemented them and facilitating their interest and understanding of them, in order to favor reflective reasoning, the survey of questions and the establishment of relationships and possibilities on the part of students, pillars of inclusive education.

5) Produce materials with themes that are part of the students' daily lives: it is recommended (as it is already for students who see) that the theme presented in the teaching material for blind students, whenever possible, is part of the daily life of the students, for better apprehension and assimilation, for example, time division (hours, days, week, month, year), transportation, seasons of year, weather and climate, commerce, school, family, work, leisure, internet, social networks etc..

6) Produce materials with non-aggressive textures: very aggressive textures besides harming with time the tactile sensitivity can generate disinterest in the search for information and knowledge through this sense.

5. Final Reflections

It is recognized that the above points are very few in the face of the immense list of issues involving the production of specialized teaching materials that will favor an inclusive education process for students blind or with low vision. The points presented in item 4 have been applied in the IBC for some time, and their effectiveness in the construction of an inclusive education will be the subject of another article. With this other points should be analyzed.

It is also understood that inclusion will not only take place through teaching materials, that although relevant and indispensable, are only a small link in the process. Other points are also of fundamental importance, such as the teaching performance and the evaluation procedure, points also from a later approach.

For now, it is emphasized that it is through the intervention and mediation of the teacher that didactic resources gain importance in classroom activities, overcoming barriers and opening up new possibilities towards inclusive geography education, whether for people with disabilities or not.

References

[1] R. Sassaki, *Inclusion: Building A Society for All* (8th ed.), Rio de Janeiro, WVA, 2010.

[2] Callai Helena Copetti, The other exists, in: Nogueira Ruth E., *Geography and School Inclusion: Theory and Practices*, Florianópolis: Editions of the Grove/CFH/UFSC, 2016, pp. 1-5.

[3] M. T. É. Mantoan, *Space: Technical-Scientific Information from INES*, Nº 13, Rio de Janeiro: INES, 2000.

[4] Ribeiro Roberto Souza and Machado, Silvio Marcio Montenegro, The geography of inclusion or inclusion in geography? In: Ruth E. Nogueira, *Geography and School Inclusion: Theory and Practices*, Florianópolis: Editions of the Grove/CFH/UFSC, 2016, pp. 153-175.

[5] Doren B. Massey, *Through Space: A New Policy of Spatiality*, Rio de Janeiro: Bertrand Brasil, 2009.

[6] Rosita Edler Carvalho, Inclusive Education: With the drips in the is, Porto Alegre: Mediation, 2004, accessed on 27 Aug. 2019, available online at:

https://pt.scribd.com/document/323095251/Education-Inclusive-with-the-drips-inthe-Is-Rosita-Edler-Carvalho-doc.

[7] Nestor André Kaercher, *Challenges and Utopias in Geography Teaching*, Santa Cruz do Sul: Edunisc, 2003.