SECTION: ARTICLES

# Training of university professors and their meaning for inclusive education<sup>1\*</sup>

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### Abstract

Exploring the theme of inclusive education requires that we discuss the training of teachers and their trainers, concerning the practices and meanings about human diversity. The goal of this paper is to analyze the training and practices of professors working in graduate courses with teaching degrees in relation to inclusive assumptions. In order to do so, the responses to the self-filling instrument applied in 26 professors who took part in the courses in Biological Sciences, Chemistry and Physics of two federal public universities were analyzed through the qualitative research approach described by González Rey. In general, the data show that the training of trainers referring to school inclusion and learning of students with special educational needs is little to none. Attitudinal barriers could also be noticed in some of the responses, demonstrating that this is a problem that is far from being overcome and constitutes an obstacle to the success of the inclusive process. In addition to these factors, it was evident that there is little institutional support and that the conditions for inclusion in the participating universities still require major changes for the process to be effective. We understand that the results can offer subsidies to a broaden discussion on the field of teacher training, also contributing to (re)thinking the teaching practices in the spaces involved.

## **Keywords**

Training of university professors – Inclusive education – Higher education.

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#### Introduction

We can say that inclusion is a pressing phenomenon in our Society, which has been discussed in several spheres, both academic, political and social. In the midst of this debate, the National Policy on Special Education in the Perspective of Inclusive Education states that:

The global inclusion movement is a political, cultural, social and pedagogical action, triggered in defense of the right of all students to be together, learning and participating without any kind of discrimination. Inclusive education constitutes an educational paradigm based on the conception of human rights, which combines equality and difference as inseparable values, and that represents an advancement in relation to the idea of formal equity by contextualizing the historical circumstances of the production of exclusion in and out of school. (BRASIL, 2008, p. 5).

Thus, according to Bueno (2008, p. 49), school inclusion "refers to a political proposition in action, of incorporating students that have been traditionally excluded from school", whereas inclusive education "refers to a political goal to be achieved". It is worth noting that, although the expanded discussion over the inclusive process in Brazil is recent, there were already some specific experiences regarding the education of people with disabilities in the country since the 19<sup>th</sup> Century. It is only in the second half of the 20<sup>th</sup> Century that we perceive the expansion of discussions and policies to assure the access of these students to education. In 1988 Federal Constitution, article 208, subsection III, we find that specialized educational assistance to people with disabilities should be carried out, preferably, in the regular school network (BRASIL, 1988). The same article, in subsection V, guarantees "access to the highest levels of education, research and artistic creation, according to each one's ability" (BRASIL, 1988, p. 92). Nevertheless, even with such guarantees, there are still significant challenges for the access and permanence in regular schools of students with disabilities and - to use the concept proposed by the Salamanca Statement in the World Conference on Special Educational Needs (UNESCO, 1994) – students with special educational needs (SEN). It is said, in this Statement, that:

The guiding principle that informs this Framework is that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups. (UNESCO, 1994, p. 6).

The target audience of inclusion, proposed by the Salamanca Statement, is not restricted to those assisted by Special Education, but including every student that, for any reason, face a situation of educational exclusion. Thus, we realize that, in Brazil, the relation between special education and inclusive education is still significant and has marked national education history, particularly from the decade of 1990 on. In recent discussions, inclusion is associated to the struggle against exclusion, aiming at its overcoming and configuring a new social paradigm, capable of directing and transforming an excluding Society in another that seeks inclusion and respect for differences. Nevertheless, in carrying out such debate, one does not take into account that, as Martins (2002) says, sociologically, exclusion does not exist, because it is a feature of capitalism, that excludes to, later, include, though in another way, following its own logic and rule, generating a precarious inclusion, unstable or marginal, that brings forth social and moral degradation.

Patto (2008) remarks that exclusion is a false problem, because the social difficulty resides in marginal inclusion, that occurs not only in the field of labor, but also in the policies of inclusive education. In the educational sphere, precarious or marginal inclusion is characterized as that in which the so-called excluded in inserted in an already existing and essentially excluding space.

Thus, we need to be aware of the necessary conditions for an effective inclusive process, the training of teachers being one of the fundamental requirements for the aforementioned process to become effective.

An important factor to be highlighted is the evolution of enrollments of students with special educational needs (SEN) in basic education, as shown by data from school census. According to School Census Statistics Synopsis, made available by National Institute of Educational Studies and Research Anísio Teixeira (INEP, in Portuguese initials), we realize that from 2004 to 2014 the enrollment of students with disabilities or SEN grew approximately 604% in regular education, going from 99.178 in 2004 to 698.768 in 2014. At the same time, the enrollment of these students in segregated spaces (special classes or special schools) fell approximately 49% in the same period. These percentages indicate that a bigger portion of students with disabilities or SEN are accessing basic education in non-segregated spaces. Nevertheless, does this increase represent the activation of their process of inclusion? How teachers that work in basic education are being trained?

Starting with these considerations, we highlight the understanding that graduate courses with teaching degrees should guarantee discussions concerning inclusive education and the diversity of students, being necessary that professors think and act future teachers' initial training so that they be prepared to assist students with SEN in their future career.

Looking at the history of teachers' training in Brazil, we can highlight that already in the end of the 19<sup>th</sup> Century it was proposed the creation of Normal Schools to train teachers to teach *first letters*. These schools were responsible for training teachers for the first years of elementary school until the promulgation of the new Law of Directives and Bases of National Education (LDB), in 1996, when the training of teachers for elementary and high school became a responsibility of higher education. With this law, the training for the initial years of elementary school began to be carried out by courses of Pedagogy or Higher Normal, and the formation for the final years of elementary school and high school must take place in graduate courses with teaching degree, abandoning the consecrated model 3+1 adopted in the beginning of 20<sup>th</sup> Century (GATTI, 2010).

Studies made in Brazil, Europe and Latin America<sup>4</sup> show important and common aspects of teachers' training. Vaillant (2006), while investigating the career of teacher in Latin America, pointed out that, although there are particularities and regional differences between the studied countries, some common features could be identified, one of them being the problems with initial training of teachers, requiring large scale interventions concerning continuing education. The author says that professionalization of teachers is built around the presence of three elements: existence of adequate conditions of work, quality training and management and evaluation that facilitate the teacher's work.

Gatti, Barretto and André (2011) point out that until the start of the 2000s the normative marks of the right to education incorporated the issue of the full exercise of individual rights. It is only by 2003 that the right to education starts to be considered in a broader dimension, that is, bound to human rights.

Education as a human right imposes itself also as a right to difference, which demands profound changes in the set of patterns of relationship within society, for the demand of acknowledgment of new social actors start to have a voice in the political arena, and gain concreteness. (GATTI; BARRETTO; ANDRÉ, 2011, p. 37-38).

Respect and concern with differences, including people with disabilities or SEN earn centrality in the educational sphere, to the extent that it demands quality education for all, regardless of their specificities. It starts to be demanded, then, political and pedagogical actions that do not mask, "under the guise of equality of opportunity", the difference in the access to cultural and social goods (GATTI; BARRETTO; ANDRÉ, 2011, p. 38).

Vygotski (2012), in the beginning of the 20<sup>th</sup> Century, already defended that opportunities of learning and development should guaranteed to everyone, being they abled or disabled. In his theory, specially regarding foundations of defectology, he pointed out to the revolutionary role of education in the life of people and for the need of cultural sphere to overcome the biological sphere.

This view is supported on the idea that, despite the biological limitations present when there is disability or SEN, they are not impediment to human development, the social conditions being those that can limit or drive the learning processes.

The training of teachers that can assist the diversity of students becomes essential for the realization of the inclusive ideal, being a factor contemplated by the new National Curricular Directives for the initial formation in higher education and continuing education, published in 2015, July 1<sup>st</sup>. Such directives state, in article 5<sup>th</sup>, subsection VIII, that the training of teachers should provide the graduate conditions to "consolidating the inclusive education through the respect of differences, acknowledging and valuing ethno-racial, gender, sexual, religious, and generational diversity, among others" (BRASIL, 2015, p. 6).

Considering this resolution, we note that, to assist the inclusive ideals, the initial training must contemplate discussions in the field to provide specific pedagogical

<sup>4-</sup> We are based on the research of Gatti, Barreto and André (2011), Imbernón (2006) and Vaillant (2006), who studied, respectively, the training of teachers in Brazil, Europe and Latin America.

knowledge as well as debates that try to minimize attitudinal barriers embedded in our society. Thus, it is essential that the discussion of teachers' training contemplate also the training of the trainers, that we come to understand who they are, how they are trained and which pedagogical actions the professors have been developing in the quest for training their graduate students to work in a school that respects inclusive ideals.

Vaillant (2003), writing a state-of-the-art study on the training of trainers in Latin America, found out the scarcity of this theme in the research on the training of teachers, specially concerning the pedagogical knowledge of trainers and the specific policies directed to the training of these teachers.

Zabalza (2004) says that professors need solid training not only in the scientific content of the discipline they teach, but also the pedagogical knowledge and the treatment of the different variables that characterize the teaching career. One of the reflections carried out by the author that gain special importance when we think of the training of trainers is the controversy present in daily life of the professors, referring to their double attribution: research and teaching. University culture attributes more academic *status* to research activities, to the point of "making them the basic component of the identity and acknowledgment of the professor" (ZABALZA, 2004, p. 154).

In general, in contests for admission in institutions of higher education, the ability for research is much more valued that teaching activities, generating a paradox in which teaching occupies a marginal place in the activities of teachers. Clearly, research activities and teaching demand distinct abilities, but many argue that, to be a good professor, one must also be a good researcher, because research requires a superior intellectual development. This argument, nevertheless, does not stand, once we realize that there are excellent researchers that work ineffectively in the classroom (ZABALZA, 2004), something that is also shown by Cunha (2014, p. 29): "the teacher tunes his attention to the researched field, not to the meaning the student must attribute to that knowledge".

The training needed for research takes place mainly during master's and doctorate's degrees courses; on the other hand, training for a teaching career happens in a much more irregular, and sometimes individual, way. There isn't a proper *locus* or a specific preparation for that (ZABALZA, 2004).

This tension between teaching and researching lives with another tension, in graduate courses with teaching degree: that between specific and pedagogical knowledges. Considering that professors, in most cases, lack the space to discuss pedagogical knowledges in their master's or doctorate's courses, the trainer's training ends up divided between those who teach the curricular knowledge bound to the course and those who teach the pedagogical knowledge. This scission leads, many times, to the idea that teachers of specific fields don't need to worry about training their students to work with basic education. But if we define graduate courses with teaching degree as courses for training teachers, aren't all the professors that work there trainers of future teachers? This is one of the essential questions to guide this study. Should professors teaching in such courses, regardless of their fields, see themselves as trainers or just, as Zabalza (2004) put it, as *explainers* of disciplinary content?

This duality is aggravated by the fact that access to basic education and also to higher education has been expanded and that an increasing diversity of students is entering the schooling process, being essential to reinforce the pedagogical dimension of university teaching, both to attend the students at this level of education, and, in the case of graduate courses with teaching degree, to provide conditions for graduates to think and develop with the students practices for what they will find in their future field of activity. Therefore, it is fundamental to focus on the meanings that professors attribute to inclusive education and SEN, as well as to understand if their training and pedagogical practices take into account the training of the graduate student to act in an inclusive school.

Based on these initial considerations, this research, developed in two federal universities located in the Southeast region of Brazil, had the goal of analyzing the training and practices of professors working in graduate courses with teaching degrees, concerning their inclusive assumptions, based on their meanings on the subject.

#### **Methodological procedures**

First, we must stress that it is not our intention to exhaust the matter in discussion with this study, but to get to know local realities in the analyzed courses, thus helping subsidize actions that aim to contribute to the training of trainers and for the betterment of conditions for inclusion in higher education<sup>5</sup>

This research had an initial quantitative stage, with the aim of characterizing the participants and presenting general questions about their knowledge concerning inclusive education. Later, we followed the qualitative approach proposed by González Rey (1997), in which the author describes the production of knowledge in research as a constructive and interpretative process. Thus, it is considered the multidetermination of the phenomena studied; the relationship between researcher and participants in the study; as well as their interpretations of the set of data, that encompasses their understanding of the studied phenomenon as a singular process. The author emphasizes that qualitative research is an effort at producing knowledge that can allow the theoretical creation of a multidetermined context, non-regular, interactive, historical.

From the consent to take part in the research and with the approval of the Human Research Ethics Committee, took part in this study 26 professors, 18 from University A<sup>6</sup> (located in the state of São Paulo) and 8 from University B (located in the state of Minas Gerais). Although the choice for the participating institutions is due to their close location to the researchers, it is worth noting that the history of the studied courses, in University A as well as in University B, are similar, as both were created by Support Program for Restructuring and Expansion Plans of Federal Universities (REUNI, in Portuguese initials) and have characteristics of structure and distribution of human resources that may favor the discussion proposed by the present study.

<sup>5-</sup> It is worth noting that the results presented in this paper are part of a bigger research project carried out by the authors.

<sup>6-</sup> We chose not to publicize the name of the institutions, in order to safeguard the identity of the informers of the research. So, the universities will be referred to as University A and B, or institution A and B.

To meet the research goals, initially we analyzed of *Lattes* curricula of all the professors from courses with teaching degrees in Physics, Chemistry and Biological Sciences of the participating universities. Later, were applied self-filling instruments (SFI) with open and closed questions to the 26 professors that agreed to take part in the study.<sup>7</sup> Such questions tried to verify how the professors understood their training for inclusive education and the meanings attributed to the issue. To determine the comprehensiveness and constitution of the SFI, a pilot-study was applied in two professors of University A, so that the questions could be analyzed and re-adapted when necessary.

To analyze the results, the data obtained through closed questions from the SFI were ordered in a quantitative form, with the main purpose of drawing a profile of the participants and their professional training. The answers to the open questions, which gave the professors the freedom to express their knowledge on inclusive education, as well as their meanings on the issue, were analyzed through clusters formed by expressions that presented high intensity by the subjects and that, later, were conceptualized and interpreted so they could be integrated to the research theoretical body, as a production od indicators and categories (GONZÁLEZ REY, 2002), with the goal of studying and analyzing the daily activities of the professors, trying to find out the way by which they become perceptible, rational and reportable.

# The training of trainers and their meanings to inclusive education

To start the presentation and discussion of results, we will deal with the analysis carried out by consulting the *Lattes* curricula of the professors who work in the graduate courses with teaching degrees in Chemistry, Physics and Biological Sciences from the studied institutions. The list of professors working in these courses was obtained by consulting the website of the universities or by contacting the course's supervisors.

The analysis of the *Lattes* curriculum tried to highlight the academic credentials of the professors, as well as whether they had the experience with the subject of special education and/or inclusive education. It was considered as experience in the subject: supervision, participation or coordination of research and/or extension project; publications; academic training; participation in events, courses, among others.

Regarding the graduate courses of these professors, we found the following: teaching degree and/or bachelor's degree in Physics, Chemistry, Biological Sciences, Mathematics or Sciences; Agronomic Engineering; Veterinary Medicine; Psychology; Pedagogy; Pharmacy; Philosophy; Social Sciences; Language; Arts; History; Speech Therapy; and Geology. We noticed that in University A a little more than half the faculty (57%,

**<sup>7</sup>**- All professor from the studied courses were invited to take part in the research, being presented with our intended goals. From the 81 professors who teach in the three courses in the participating institutions, only 26 agreed to be informants in the study, the adherence in University A being considerably higher than in University B.

approximately) had a teaching degree. In University B, this percentage fell to 39,6%,<sup>8</sup> which is, in our understanding, far from the ideal.

Even though teaching degrees are for elementary and/or high school levels of education, we consider it important that the professors involved in such courses have such training, since, as Cunha (2014) points out, in general, we find that only the specific knowledge of the subject which will be taught by the professor is required, not emphasizing the pedagogical preparation to the practice of teaching. The author also says that teaching demands theoretical and practical knowledge not restricted to the discipline taught by the teacher.

As for the experience in the subject of special education and/or inclusive education, in the institution B, 11 professors (22,9%) showed experience in the field, but only three of them had the academic training (graduate, master's or doctorate's degree) related to it. In the institution A, four (12,1%) had experience in the field, with two professors with corresponding academic training. We stress that the numbers found are expressively low, and when we think of the ideal of inclusive training, it is a matter of concern.

We believe it to be essential that professors in courses with teaching degrees reflect on the importance of the respect for diversity and subsidize the performance of future teachers in favor of the implementation of an inclusive school, in the search for democratization of education. When we perceive such a low percentage of professors that already had contact with the subject of inclusive, some questions arise: how are we thinking of the role of our formers? Is it possible that, although we have formally separated the courses of teaching and bachelor's degrees, we still perpetuate the logic that professors of a specific field teach content, while those of the pedagogic field teach how to be teachers? And, considering that inclusion at school is increasing, at least in number of enrollments of students with SEN, wouldn't it be necessary that all trainers who act in course with teaching degree have knowledge and concern with the issue?

Looking for answers to these question, we applied the self-filling instrument (SFI) with open and closed questions that tried to identify the understanding and position of the faculty of the analyzed courses regarding special and/or inclusive education. From the 31 SFIs distributed to professors in University A, 18 were filled. From the ten distributed to professors in University B, eight were filled.<sup>9</sup> From the analysis of the closed questions of this instrument, we were able to initially establish a profile of the professor who participated in the research regarding gender, age and time teaching outside and within the university.

From the participants in the research we verified, in both institutions, only two didn't have a teaching degree. This is a relevant datum when we think that, in the analysis of the *Lattes* curricula, 58% of the professors from University A and 39,6% from University B had a teaching degree, what points to two possibilities: a tendency of

**<sup>8</sup>** - It is Worth noting that, from the 33 professors in University A, seven did not inform in their *Lattes* curricula if they had a teaching degree, bachelor's degree, or both; in University B, the same happened in the case of 16 professors among the 48 teaching in the courses studied.

**<sup>9</sup>**- Although we have a greater number of professors working at university B, at university A, as a result of the fact that almost all the professors who teach in the teaching degree belong to the same department, we noticed that it was easier to deliver the SFI and receive the agreement to participate of the research.

greater concern from professors with teaching degree in responding the SFI, or that they responded because they felt somewhat familiarized with the subject. It is worth clarifying that the questionnaires were delivered to professors in the specific area, as well as in the pedagogical area, being discussed with each of them about the goals of the study and its importance. After this contact, it was given a deadline for the professors to spontaneously hand in the filled SFIs, without any kind of pressure from the part of the researchers.

Although we know, from the graduation date of the professors, that the clear majority of them were formed in the model 3+1, we consider it to be relevant the greater participation of professors with teaching degree in the research, because it somehow shows a certain approximation with pedagogical questions.

Regarding the experience and the training for inclusive education, professors were questioned about their knowledge of policies for special and inclusive education. From the 18 informants in institution A, only six declared to have contact with any normative document. Of these six two could name laws or policies on the subject, and the other four, though they couldn't name any specific document, showed knowledge about some principles of inclusive education. In institution B, five claimed to have knowledge, four of which pointed to laws or directives aimed at the inclusion of students with SEN.

Another question referred to the definition of the concept of SEN, and although nine professors from University A and five from University B claimed to know the definition, none of them understood all the conditions defined as SEN by the National Policy on Special Education in the Perspective of Inclusive Education, published by the Department of Special Education, of the Ministry of Education, in 2008. Nevertheless, it is worth noting that on professor likened his definition to that of the Salamanca Statement (1994), taking into consideration linguistic and cultural minorities, as well as disabilities.

An important point for the research analysis refers to the understanding of the professors of the responsibility of the teacher to teach students with disabilities or SEN in their classrooms. In the institution A, 18 out of 18 claimed to be responsible for teaching these students; in the institution B, five out of eight considered themselves responsible, giving different justifications for their claim, of which we can highlight:

P1: I consider it to be a responsibility of the teacher and the school management, for the teacher needs institutional support.

P4: Diversity is typical of the human being. It is important to understand it and expand its potentialities. The access to knowledge is a right of everyone, and everyone must find the means for the inclusion to occur, in any level, under any conditions.

P11: All my students are of my responsibility.

P15: Because it's not allowed the teacher to choose, necessarily, for whom to teach. And this is very good, because it allows the teacher to evaluate his processes and try to welcome all the diversity that it is presented to him, even if he's not ready for it.

In a broader analysis of all the answers, we can highlight two repeating factors: the conscience of responsibility from teacher in teaching all his pupils and the importance of institutional support for the process to be effective. Such thoughts are in line with Saviani's

(2009) understanding that, despite the starting point of our students being diverse, the goal of education is to provide the same point of arrival to them all. In this perspective, school education must be attentive to student's appropriation of systematized knowledge – therefore, scientific, philosophical and artistic knowledges historically accumulated. Thus, each teacher is responsible por teaching every single one of his pupils, regardless of their starting points.

Two professors from University A and two from University B claimed not to be their responsibility to teach these students, these being some of the justifications:

P7: For lack of qualification for me to assist everyone in a way that I can provide the same opportunities of learning for all.

P12: I am not qualified. I feel already overwhelmed with teaching students without SEN. I think their inclusion is of the most importance. Nevertheless, the institution most provide all the support for the teacher and the student. For instance: hiring auxiliary teachers to assist the education on students with SEN.

PAl4: I believe the ideal would be to be a support team specially prepared to deal with cases of SEN that would assist the teacher to guide him in the processes of teaching and learning more adequate to specificity.

The answer presented by P7 shows lack of clarity and commitment in relation to the subject, because with the justification of lack of qualifications, the teacher exempts himself from the responsibility to teach a student that is enrolled in his classroom, due to the fact of having a disability or SEN. PA14's answer, though denying responsibility, points to the fact that the teacher needs specialized guidance, something that doesn't go against the National Directives for Special Education in Basic Education of 2001, that propose the joint action of the regular teacher along with a specialized teacher. Could this model be adopted also in higher education? Of course, this Division of pedagogical labor, as discussed by Michel's (2006), brings problems to the schooling of students with disabilities or SEN, because most times it leads to a transference of responsibility for teaching to the specialized teacher. However, if the partnership between regular and specialized teachers were truly collaborative, it can bring benefits to the inclusive process. The author also says that

[...] the training of teachers today proposed by the Brazilian educational policy does not enable the overcoming of exclusion. On the contrary, such proposition consolidates the exclusion of students from lower classes, be they considered disabled or not, within the same school. We no longer speak of excluded from (elementary) school, but of excluded from the learning process inside the school. (MICHELS, 2006, p. 417-418).

This question resumes the process of marginal inclusion discussed earlier, which transforms schools and universities in perverse and degrading environments that officially include the student, but don't enable him the effective participation in the process teaching-learning. In the universities, trainers must be aware of this fact, so as not to

perpetuate this kind of practice, and this goes through their own training. Considering that the movement of school inclusion, not taking into consideration earlier discussions of integration, is already broadly discussed and with legal guarantees since the 1990s, two decades after we can still see the justification of lack of qualification as an argument to exempt oneself from the commitment to this subject. Qualification and training come not only in the initial form, but also continuous; so, can we still sustain this as a valid justification? It is worth noting that we are not ignoring the great challenges present in the training of teachers and teaching practice. Nevertheless, such challenges do not exempt ourselves of the responsibility of teaching our students indistinctively. Verifying these conceptions among professors of courses with teaching degree brings forth another concern: how are they training future teachers to work in an inclusive school?

When questioned about having received qualification or training to work with students with disability or SEN, only two professors from University A and two from University B answered positively. In the question regarding to being able to identify the presence of disability of SEN in their students, six professors from institution A answered positively, one answered that it depended on the case and one even wrote that "some cases are obvious" (P21). It seems weird that professor that did not receive the training to work with students with SEN, and that in the question about definition of SEN answered that they did not know, or presented wrong concepts, claim to be able to identify such conditions. It leaves the impression that the SEN are simple or obvious conditions, and that to identify them daily knowledge and common sense are enough. Clearly a student with blindness or deafness can be easily recognized, but how about more specific and subjective conditions, like Asperger's Syndrome and lighter intellectual disability? In our understanding, it is essential for professor to receive proper training, that brings forth solid and conscientious understanding that goes beyond hallway talks that many times start with questions like "that student is troubled, isn't he?"

The participants in the research were also questioned about their experience in the classroom with students with disabilities or SEN. Eight of the professors from University A claimed to have administered classes to students with SEN; of these, only one informed to have been prepared for this. In University B, five professors already had experience with this kind of student and had been prepared for it. In reporting how was the experience, a great part claimed it was difficult, due to lack of preparation. Nevertheless, it called our attention the answer of a professor in institution A, that administered classes to a student with hearing disability: "Excellent experience! There was the assistance of a sign language translator" (P5). We noticed in this speech that the support for the inclusion to take place, by means of making available de appropriate resources for assisting students with disability or SEN is of great advantage in the teaching-learning experience and the professor's own awareness of the inclusive process.

Another factor, pointed out by a professor from institution B, was the importance of the dialogue with the student: "Dyslexia. I didn't have problems. The constant dialogue with the student was important to minimize the difficulties" (PA18). This response shows us that is important for the teacher to try to contact the student and establish a real dialogue that favor the inclusive process. Thus, both answers show that, by providing the proper conditions (such as the sign language translator mentioned by P5) and opening dialogue with the student with disability or SEN, the learning process happens, reducing the idea of deficit or inability, so embedded, when we talk about this target audience.

The questions about preparation and the experiences of the professors with students with disability or SEN bring a factor that corroborates the studies of Vygotski (2012), by proposing that the development of the individual with disabilities demands social compensations that depend on special resources that can generate alternative pathways. For the author, biological factors bring less opportunities for change than social factors, because, most of the time, they are attached to a development pattern that is affected by the presence of a disability. Thus, it is by means of the existence of forms of social compensation – social, cultural and physical adaptations – that a person with disabilities can develop.

This understanding of human development remains in the following work of Vygotski (1995), in saying that superior psychological functions depend on the appropriation of instruments culturally modified by man, in a way that human condition is only built in the process of interaction between individual and the other. For this, physical instruments – typical of the culture and the historical time to which the person belongs – and symbolic instruments are both necessary, dependent on the internalization of language.

Professors P5 and PA18, in revealing the importance of a sign language translator and dialogue, respectively, show that the presence of special resources, that is, physical and symbolic instruments adapted to the needs of the individual, can favor learning and, by consequence, development.

As to the question whether the institution provided experiences directed towards an inclusive education, nine professors from University A and four from University B said no, one of them saying that "There is a support central, but it doesn't work as it should, so it makes no difference!" (PA14). This was the only answer that pointed to an institutional initiative; all the others who said that there are experiences provided by the institution, either couldn't specify which were, or mentioned isolated initiatives from professors in organizing events or courses, quotas for admission at university (as part of the institution's affirmative actions), extension projects, the existence of disciplines in the teaching degree courses and physical adaptations. Against this backdrop, how to expect the appreciation of the inclusive process in higher education, when the federal public institutions analyzed show little care for the issue?

The highlighted initiatives, such as the existence of disciplines offered in the teaching degree courses, sometimes reflect only an official norm, since decree 5.626/2005 makes the teaching of sign language mandatory in many graduate courses, including those aimed at forming teachers (BRASIL, 2005). It was also highlighted the existence of a discipline focused on inclusive education, whether compulsory or not, a fact that in our understanding may favor the implementation of guidelines for teacher's training in 2015 (BRASIL, 2015). Nevertheless, institutional initiatives cannot be restricted to specific and isolated experiences throughout the teacher's initial training, if we are really intending to build a democratic basic education, as proposed by Bueno (2008).

Finally, each participant pointed three favorable and three unfavorable aspects of school inclusion. The answers were compiled, and the data are shown in Table 1.

Favorable aspects	Informants	Unfavorable aspects	Informants
Reducing prejudice	4	Lack of specialized professionals	1
Teacher's training	2	Lack of infrastructure, lack of accessibility, lack of resources	17
Better opportunity for professional training for students with SEN	5	Prejudice / Bullying / Resistance from school community	11
Respect for differences	5	Need for more research and information on the inclusion process	1
Appreciation for each individual's potential	3	Lack of special policies, permanence policies	2
Social inclusion, socialization	13	Possibility of the class falling behind	2
Better cognitive development	1	Marginal inclusion	2
Learning with diversity	7	Teacher overload	1
Equal rights and opportunities	8	Lack of training for the teacher	19
Inclusion	4	Lack of awareness in school and university environments	1
Social responsibility from all community	1	Lack of attention for students with SEN	1
Experimenting with practical alternatives	1	Inclusion in the labor market	1
Reflection and improvement of the teacher's performance	3	Little integration with teacher working in this field	1
Generating demand for change	2	Lack of lectures, courses, information	2
Physical and financial Independence	1	Students with different skills may make unfeasible certain practices indispensable for the teaching and learning process	1
Making the university more accessible	2	Lack of institutional support	1
Helping families	1	Crowded classes	1
Humanization of the educational process	1		
Overcoming difficulties	2		
Learning for life	1		
Receptivity from people	1		
Duty of the State	1		

Table 1 - Favorable and unfavorable aspects of inclusion in higher education<sup>10</sup>

Source: Elaborated by the authors.

Analyzing Table 1 we notice that the favorable aspect most often mentioned were the possibility of school inclusion and socialization. We must take a careful look into this question, since socialization is an integrating factor of school inclusion and a favorable aspect for it to occur. However, we cannot be contented with only putting a student with

**<sup>10-</sup>** In this table the answers were piled in groups, and the column Informants shows the total sum of participants that pointed to the respective aspects.

disability or SEN in a classroom, be it basic or higher education. When we put a student in a school environment, our goal must always be that he takes part in the teachinglearning process and, as Saviani (2008,2009) says, that he appropriates the systematized knowledge; otherwise, we'll be favoring marginal inclusion, that was an unfavorable aspect mentioned by two professors.

It is interesting to note that seven favorable aspects are related to attitudinal changes, and attitudinal barriers like prejudice and resistance in accepting students with disability or SEN were mentioned as unfavorable aspects by 11 informants. This datum shows us that Amaral (2002) and Prieto (2003) were correct in stating that such barriers are still a great hindrance for the inclusion and the training of teachers that can appreciate the potentialities of their students.

Although two participants described the possibility of professional training as a favorable aspect, the lack of it was the most noted unfavorable aspect. The second unfavorable aspect most often mentioned as an unfavorable aspect are architectural barriers and lack of resources (17). It is clear in the answers of the informants that, beside the lack or training for teachers, the lack of institutional support and resources brings serious problems to inclusive education. We think that, as proposed by Saviani (2008), school education, in our society – and higher education, in the case of this research – is created as a privileged space for men the reach more developed levels among the human genre. In face of that, we must, as Duarte (2013) proposes, treat the premise of historic-cultural psychology, that shows us that psychic phenomena are inserted in a greater whole, that is, social life.

Vygotski (1995) says that development happens by the process of interaction between the *most* developed and the less developed, based in Marx's thought that the key to understanding the ape is in humans. Transposing this premise to the school, Saviani (2009) calls attention for the importance of the transition from synchresis to synthesis by mediation of the abstract. Thus, it is in the interaction between the professor – that has initially a precarious synthesis – and the student – that has synchresis as the starting point – that synthesis can be reached, as the arrival point. In this sense, how to deprive the student with SEN for true school inclusion? Justifications such as lack of training, precarious conditions and lack of institutional support – though representative of many realities found in schools and universities – cannot, or at least should not be used as a way to favoring exclusion or marginal inclusion of any student. The role of the teacher, then, becomes essential in this process. And, thinking of teachers' trainers, a situation is even more important, because such professionals are forming future teachers who can either favor or hurt the activation of inclusion in basic education.

#### **Final considerations**

In this paper, we tried to discuss the training of trainers from two federal universities of the Southeast region of Brazil, and highlight the importance the insertion of the subject of inclusive education in the university environment in a way that equalizes opportunities and assures that teachers receive proper preparation and support to work with students with disabilities or SEN.

The data show that most professor involved with research had no training in the field of special and/or inclusive education and didn't receive any specific training to work with students with disability or SEN either. Another important conclusion refers to the fact that the institutional initiatives aiming at school inclusion mentioned by the informants were restricted to the insertion of disciplines in the courses with teaching degree or legal obligations, such as the presence of affirmative action.

A relevant aspect is that when asked to mention favorable and unfavorable aspects of inclusion, a great part of the professors considered modifications in attitudinal aspects – such as humanization of schooling and social responsibility – as favored by inclusive process. This factor, as earlier discussed, shows us that inclusive education can become a paradigm for the establishment of more democratic society.

As Bueno (2008) says, although inclusive education is a subject of great incidence in national and international political propositions, having entered discourses of many different ideologies, in academic and technical-professional output it must be seen as only a stage in the accomplishment of a true democratization of education.

Finally, we agree with Zabalza (2004) that the training of trainers needs to be reviewed and that, aside from academic and research output, professors need to be concerned with the kind of professionalization they are providing their students. It is urgent that professors turn their gaze to pedagogical forms of knowledge, and not only those that are part of the content of their disciplines.

#### References

AMARAL, Lígia Assumpção. Diferenças, estigma e preconceito: o desafio da inclusão. In: OLIVEIRA, Marta Kohl; SOUZA, Denise Trento R.; REGO, Teresa Cristina (Org.). **Psicologia, educação e as temáticas da vida contemporânea.** São Paulo: Moderna, 2002. p. 233-248.

BRASIL. Constituição da República Federativa do Brasil. São Paulo: Editora Revista dos Tribunais, 1988.

BRASIL. Decreto nº 5.626, de 22 de dezembro de 2005. Regulamenta a Lei no 10.436, de 24 de abril de 2002, que dispõe sobre a Língua Brasileira de Sinais - Libras, e o art. 18 da Lei no 10.098, de 19 de dezembro de 2000. **Diário Oficial da União**, Brasília, DF, 23 dez. 2005.

BRASIL. Decreto nº 7.611, de 17 de novembro de 2011. Dispõe sobre a educação especial, o atendimento educacional especializado e dá outras providências. **Diário Oficial da União**, Brasília, DF, 18 nov. 2011.

BRASIL. Lei nº 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. **Diário Oficial da União**, Brasília, DF, 23 dez. 1996.

BRASIL Ministério da Educação. Diretrizes nacionais para a educação especial na educação básica. Brasília, DF: MEC/SEESP, 2001.

BRASIL. Ministério da Educação. **Política nacional de educação especial na perspectiva da educação inclusiva.** Brasília, DF, 2008.

BRASIL. Ministério da Educação. Resolução nº 2 de 01 de julho de 2015. Define as Diretrizes Curriculares Nacionais para a formação inicial em nível superior (cursos de licenciatura, cursos de formação pedagógica para graduados e cursos de segunda licenciatura) e para a formação continuada. **Diário Oficial da União**, Brasília, DF, 2 jul. 2015.

BUENO, José Geraldo Silveira. As políticas de inclusão escolar: uma prerrogativa da educação especial?. In: BUENO, José Geraldo Silveira; MENDES, Geovana Mendonça Lunardi; SANTOS, Roseli Albino dos (Org.). **Deficiência e escolarização:** novas perspectivas de análise. Araraquara: Junqueira e Marin; Brasília, DF: Capes, 2008. p. 43-63.

CUNHA, Maria Isabel. Estratégias institucionais para o desenvolvimento profissional docente e as assessorias pedagógicas universitárias: memórias, experiências, desafios e possibilidades. Araraquara: Junqueira & Marin, 2014.

DUARTE, Newton. Vigotski e a pedagogia histórico-crítica: a questão do desenvolvimento psíquico. **Nuances**, ano 19, v. 24, n. 1, p. 19-29, jan./abr. 2013.

GATTI, Bernadete Angelina. Formação de professores no Brasil: características e problemas. Educação e Sociedade, Campinas, v. 31, n. 113, p. 1355-1379, 2010.

GATTI, Bernadete Angelina; BARRETTO, Elba de Sá; ANDRÉ, Marli Eliza. **Políticas docentes no Brasil:** um estado da arte. Brasília, DF: Unesco, 2011.

GONZÁLEZ REY, Fernando. Epsitemología cualitativa y subjetivdad. São Paulo: EdUC, 1997.

GONZÁLEZ REY, Fernando. Pesquisa qualitativa em psicologia: caminhos e desafios. São Paulo: Thomson, 2002.

IMBERNÓN, Francesc. La profesión docente desde el punto de vista internacional ¿qué dicen los informes? **Revista de Educación**, Madrid, n. 340, p. 19-86, mayo/ago. 2006.

MARTINS, José de Souza. A sociedade vista do abismo: novos estudos sobre exclusão, pobreza e classes sociais. 2. ed. Petrópolis: Vozes, 2002.

MICHELS, Maria Helena. Gestão, formação docente e inclusão: eixos da reforma educacional brasileira que atribuem contornos à organização escolar. **Revista Brasileira de Educação**, Rio de Janeiro, v. 11, n. 33, p. 406-423, 2006.

PATTO, Maria Helena Souza. Políticas atuais de inclusão escolar: reflexão a partir de um recorte conceitual. In: BUENO, José Geraldo Silveira; MENDES, Geovana Mendonça Lunardi; SANTOS, Roseli Albino dos (Org.). **Deficiência e escolarização:** novas perspectivas de análise. Araraquara: Junqueira e Marin; Brasilia, DF: Capes, 2008. p. 25-42. PRIETO, Rosângela Gavioli. Formação de professores para o atendimento de alunos com necessidades educacionais especiais: diretrizes nacionais para a educação básica e a educação especial. In: SILVA, Shirley; VIZIM, Marli (Org.). **Políticas públicas:** educação, tecnologias e pessoas com deficiência. Campinas: Mercado de Letras: Associação de Leitura do Brasil, 2003. p. 125-151.

SAVIANI, Dermeval. Escola e democracia. 41. ed. Campinas: Autores Associados, 2009.

SAVIANI, Dermeval. Pedagogia histórico-crítica. 10. ed. Campinas: Autores Associados, 2008.

UNESCO. **Declaração de Salamanca.** 1994. Disponível em: <a href="http://www.unesco.org/education/pdf/salama\_S.PDF">http://www.unesco.org/education/pdf/salama\_S.PDF</a>>. Acesso em: 10 jul. 2015.

VAILLANT, Denise. Atraer y retener buenos profesionales en la profesión docente: políticas en Lationoamérica. **Revista Educación**, Madrid, n. 340, p. 117-140, maio/ago. 2006.

VAILLANT, Denise. Formação de formadores: estado da prática. Santiago de Chile: Preal, 2003. (Preal documentos; n. 25).

VYGOTSKI, Lev Seminóvic. **Obras escogidas:** el significado histórico de la crisis de la Psicología. v. 3. Madri: Visor, 1995.

VYGOTSKI, Lev Seminóvic. Obras escogidas: fundamentos de defectología. v. 5. Madrid: Machado, 2012.

ZABALZA, Miguel A. **0 ensino universitário:** seu cenário e seus protagonistas. Porto Alegre: Artmed, 2004.

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