

EVALUATION OF THE INCLUSION REALITY AT PUBLIC SCHOOLS IN FLORIANOPOLIS, SC

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ABSTRACT

This article presents a descriptive study about the evaluation of the management of assistive technologies at educational unities of the Municipal network of Florianopolis that have students with some kind of deficit or incapacity in their classrooms. The study consisted in gathering data about the current conditions of the management of assistive technologies from the point of view of special educational care teachers, classroom teachers, assistants and pedagogic supervisors. The results presented will guide multidisciplinary research in design and ergonomics aiming at suggesting solutions in assistive and communication technologies that allow the constant improvement and education of teachers, in the spirit of improving the capacity of learning and the social inclusion of handicapped children.

KEY-WORDS

Design, Assistive Technologies (AT), Municipal Schools.

1. INTRODUCTION

Since the implementation of the Brazilian Law 9.394/96 and of the Law of the State of Santa Catarina nº 7853/89, the enrollment of handicapped children at public schools is mandatory. According to Raiça (2008), the inclusion of children with special educational needs in regular schools, with different problems, whether physical, social or psychological, of any ethnicity, genre and socioeconomic condition is being transformed from an utopia into a reality at the public schools in the country.

Blattes (2006, p.05) argues that:

We live in a democratic society that has, by definition, the plurality, coexistence and dialogue in diversity. The right to take part in the common spaces and processes of education performed by the school is foreseen by the law and the educational polices must be compatible with those presuppositions that lead to the full access and equal conditions in the educational system.

What is found is that the schools are not yet properly adapted to the needs of the handicapped individual, with respect to accessibility, mobility and execution of daily tasks. This lack of adequacy may cause even greater deficits to the individual, besides several implications for their development.

Dischinger (2004, p. 05) explains that:

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In practice, the inclusion depends on several factors. If, by one sideon one hand, the existence of laws and the access to the education aims to eliminateat eliminating political, social and behavioral barriers, on the other side hand, physical and spatial changes are needed to allow the access and the good successful performance of the human activities through a proper design of equipments, spaces and build environments built.

In face of this inclusion scenario, some tools are being used to help the students in the process of learning, mobility and independence. These tools are called Assistive Technologies, an expression that according to the National Secretary for Rehabilitation and Integration of Handicapped People in Portugal (SNRIPD *apud* Bersch 2008, p. 03) is "still a new term, used to identify all the resources and services that contribute to give or increase functional abilities in handicapped people, therefore promoting an independent life and inclusion." In Florianopolis, this scenario of inclusion "attempts" is no different, but the current reality and the main problems faced by the schools and teachers related to Assistive Technologies are still unknown.

This study presents the results of an exploratory research carried out at three schools of the Municipal School System of Florianopolis – SC, developed with teachers in the specialized educational care, pedagogic supervisors, classroom teachers and assistant poles, in order to generate information related to the use of Assistive Technologies and their Management Process that may subsidize studies for the creation of solutions in design, ergonomics and Assistive Technologies.

2. METHOD

This work is a descriptive exploratory study, with the sole purpose of gathering information about the reality of the schools of the Municipal School System of Florianopolis-SC offering early childhood and primary education, with respect to the usage history and management of Assistive Technologies. The research was carried out in 2011 at three schools (two primary schools and one day care center) of the Municipal School System of Florianopolis-SC, at children with some kind of special educational need were amongst the students. The study was approved by the Ethics Committee for Human Research of the Santa Catarina State University under protocol 150/2011. The schools were first contacted for an explanation about the procedures of the research, and after signing the Statement of Informed Consent and Agreement, the data was gathered.

The gathering consisted in a structured interview (Appendix 1) conducted with teachers of the poles of specialized educational care, pedagogic supervisors, classroom teachers and assistants, using some macroergonomics methods, such as the interview method and the focus group. The interview method, according to Stanton (2004), seeks to understand the behavior of the interviewed, which was achieved by the application of the structured questionnaire and the audio recording. Using the focus group method (with educators of the poles of specialized educational care, pedagogic supervisors, classroom teachers and assistants), the aim was to unveil their needs in terms of the management of Assistive Technologies and their qualification about the subject.

3. RESULTS AND DISCUSSION

3.1. Characterization of the Schools

The teachers of the poles of specialized educational care, pedagogic supervisors, classroom teachers and assistants from three public municipal primary schools and day care centers located in Florianopolis municipality, Santa Catarina, were interviewed. The teachers of the specialized educational care are responsible for the regional poles that take care of children with different levels of disability. Those poles act on the processes of communication, stimulation and learning of handicapped children by means of Assistive Technologies (AT). The classroom teachers and assistants work daily and directly with the handicapped child –also using AT as the student requires – and take part, together with the teachers of the

specialized educational care and with the pedagogic supervisors, in the process acquiring AT services and equipment specific for handicapped children.

3.2. History of Use and Management of Assistive Technologies at Primary Schools and Day Care Centers

As the data gathered was analyzed, a few key topics that may be used as a reference for the development of research, products or services by designers were defined based on ergonomic concepts and Assistive Technologies with the objective of promoting significant improvements in the scholar performance of both handicapped children and their teachers and tutors.

The study found that the process of ordering and delivery of products and services for handicapped children depends on the evaluation and observation of the student by the classroom teacher, assistant teacher, teachers of the specialized educational care, managers of the Municipal Secretary of Education and in some cases, health professionals (such as occupational therapists or physiotherapists) from partner institutions that take care of handicapped children. Oftentimes, some information is provided by parents or tutors (medical diagnostic, medical assessments) or by institutions where the students are provided with some kind of care, such as the Foundation for Special Education ("Fundação Catarinense de Educação Especial (FCEE)") or the Association of Parents and Friends of the Handicapped (APAE).

The school professionals were questioned about the existence of a proper training aimed at understanding the demands of handicapped people in Brazil, as well as the law involved in the process, and 67% of these professionals indicated that they had received some kind of training in that respect. Moreover, 67% also indicated the need to develop other competences or to establish partnerships in order to perform some activities involved in the process of acquiring and managing AT.

In relation to the existence of planning activities at the school for each individual case to be cared for, 100% of the interviewed answered that planning is done and that research is made about the specific needs of the person involved and about the context in which the resources to be provided to the student will be used. After a diagnostic or assessment of the students is carried out, the products and services that better fit them are specified by the Ministry of Education and other partnerships, made by the Management of Inclusive Education of the Municipal Secretary of Education of Florianopolis-SC. After specifying the resources, the process of purchasing or developing the AT is mediated by the "Special Education Foundation of Santa Catarina" (Fundação Catarinense de Educação Especial) or by the Action Plan regulated by the Ministry of Education (MEC), through which the budget and the public bidding processes are begun. The delivery of the resources required by the student is often secured by vehicles owned by the institution or through the mediation of the "Association of Handicapped of Florianopolis" (AFLODEF).

The study found that 100% of the persons interviewed indicated that the resources acquired require physical and/or pedagogical adaptations. In this case, there are support services related to maintenance, technical assistance or monitoring of the performance of the acquired resource.

It was also noted that there is no formal evaluation of the satisfaction of people involved in the context of acquired resources. Amongst the positive points highlighted in the current process of ordering and the delivery of products and services to handicapped students through the State, the most relevant ones indicated the advances in the Law of Inclusion and the increase in accessibility budgets delivered by the Ministry of Education.

Additionally, the interviewed suggested that in order to improve the process of managing Assistive Technologies, the time between the application for and the delivery of the AT services and resources must be reduced. It was also suggested that improvements be made in the available technologies, the accessibility of playgrounds, the processes of managing resources, the process management and the management of AT itself.

According to the interviewed, the existence of a standardized process that describes the activities to be performed for correctly applying for the AT before the State and other organizations, resulting in standardized processes and forms, would make the work of the school managers much easier.

The Education Law ("Lei de Diretrizes e Bases da Educação"), nº 9.394, from December 20th, 1996 makes reference to the special education in chapter V. According to it:

Art. 58. It is understood by special education (..) the modality of school education offered preferably by regular public schools to students with special needs.

In theory and in accordance with the law, the government must ensure that all students with special needs are enrolled at school, but this does not happen. When those children finally arrive at school, they meet other obstacles in their integration into society, such as the poor management of resources that secure their accessibility, the lack of proper infrastructure and unqualified teachers. According to the LDB (1996),

Art. 59. The educational systems will ensure the students with special needs with: I — specific curriculum, methods, techniques, educational resources and organization to fulfill their needs; specific terminality for those who can't reach the demanded level to graduate from primary school due to their deficiencies.

This agrees with Michels' (2009) statement that the reorganization of the school system of Florianopolis – in terms of the inclusive education proposal – is based on the understanding of inclusion as a practice (eliminating obstacles). Thus, according to the author, the school system does not relate the process of inclusion to the universal rights and places the education of the students considered handicapped as a matter of individual capacity.

First of all, it is necessary to provide these individuals with minimal conditions by means of the implementation of social and health programs directed towards their development as well as the development of their families. Then, it is also necessary to appropriately qualify everyone who is part of the children's daily life, so that they are focused on their progress and to implement efficient processes for the acquisition of AT within the shortest time possible. Finally, the task of Design is to focus on the project of products that stimulate and facilitate the access of handicapped to information and communication technologies, products that improve mobility and transportation and promote the well-being of this large parcel of the Brazilian population that is currently more and more integrated to the labor and the consumer market.

4. CONCLUSION

Based on the postulations of the LDB and on the answers of the individuals interviewed, it is possible to conclude that it is not enough to simply enroll students at school and leave them under the teachers' care. The respondents were unanimous when they ensured that there is a plan in place to deal with the acquisition and delivery of AT for the handicapped student. In this case, conformity with paragraph 1, art. 59 of the law - which ensures that the curriculum, methods, techniques, educational resources and specific organization must fulfill the needs of those students - was evidenced.

At several times, the respondents mentioned how the work done in partnership with the specialized professionals of the FCEE and of the APAE is essential. In this case, it is possible to observe that Article 60, which predicts that "the regulatory bodies of the school systems will create some characterization criteria of the specialized private non-profit institutions with exclusive actuation on special education, for the purpose of technical and financial support by the Government", is in some way being completely fulfilled. Without the support of those entities, the care for handicapped children would be more difficult for the teachers of regular schools.

Article 68, § 3 of the LDB establishes that "for the initial estimation of the minimum values laid on this article, the revenue estimated on the annual budgetary law, adjusted, when needed, by law that authorizes the opening of additional credits will be considered, taking for base an eventual surplus of

revenue." The teachers mentioned the advances of the law concerning special education and the increase of resources allocated as positive points in this process of the students' integration. The OCDE (2010, p. 97) states that 3.4% of the state budget for education is meant for students with special needs. From this total, 2.5% are resources from the Fund of Maintenance and Development of Basic Education and Valorization of Education Professionals (FUNDEB) and the State contributes with less than 1% for this population.

The document called Assessment of National Policies for Education in the State of Santa Catarina, produced in 2010 by the OCDE and commissioned by the State Government, concluded that:

The inclusion of handicapped students at regular schools may cause a counter effect on the student if the educational system is not properly equipped to deal with demands such as the increase of diversity in the classrooms and the demand for additional personnel and resources. In Santa Catarina, there are two potentially deficient areas: the offer for treatment and the identification of handicapped children. (OCDE, 2010, p. 100)

This statement endorses the answers of the respondents when questioned about the process of evaluation of an AT demand. The delivery to the student of resources requested is often secured by the institution's own vehicle or through a nongovernmental organization. The government lacks a defined standard to help those students. If that was the case, according to the respondents, the existence of a pattern defined by the government would help the work of the school managers. Thus, an inconformity of the reality with the LDB was identified, as the latter establishes that the school systems must ensure specific conditions of study and learning to the students.

Concerning the qualification of teachers, the respondents highlighted the need for constant qualification and updating about Assistive Technologies and some deficiencies. On this topic, we noticed some inconformity with Article III that establishes that teachers with adequate specialization at middle or superior level of specialized care must be found in the classrooms, as much as teachers of regular schools must be ready to integrate those students into common classrooms. Many answers provided by the respondents lead us to conclude that the LDB is being correctly applied in many points, however, in others, it is still necessary to evolve more.

5. ACKNOWLEDGEMENTS

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7. APPENDIX 1

History of Use of Assistive Technology (AT) Semi-structured Interview

The aim of this research is to gather information about the history of use of Assistive Technology for each situation studied that is to be used as the foundation for a continuous improvement of the current process of availability of products and services to handicapped students by the municipal school system of Florianopolis. We expect the utmost collaboration from the respondents in expressing their points of view with respect to the current process, the benefits received, the hardships found and possible suggestions that may help this research.

collaboration from the respondents in expressing their points of view with respect to the current process, the benefit received, the hardships found and possible suggestions that may help this research.
1) How long have you been a teacher of handicapped students?
() Less than 6 months; () From 6 to 12 months; () More than 1 year.
2) What are your main difficulties in dealing with this student?
3) Please elaborate on the training you have received to deal with handicapped students, especially the ones with
CP.
4) Did you follow the process of ordering or purchase of an AT resource for this student?
() Yes () No
If Yes, how was that process? Elaborate on the positive and negative aspects noticed during the activities involved in
ordering the resource.
5) Did you receive any training to properly use the resource? () Yes () No
If Yes, comment about this service. If No, how did you feel about the lack of it?
6) How do you feel about the performance, in the classroom, of the resource acquired for the student?
() Unsatisfied () Somewhat Unsatisfied () Satisfied () Somewhat Satisfied () Very Satisfied
7) Does the student receive any supporting services related to maintenance, technical assistance or monitoring of
the performance of the resource acquired?
() Yes () No
If Yes, comment about this service. If No, how did you feel about the lack of it?
8) If the resource required adaptations, were you happy with the adaptations made?
() Yes () No
If No, which aspect could be improved?
9) During the time of use of the product or service, how would you classify the improvement of the performance of
the daily activities with the handicapped student?
() Nonexistent. () Poor. () Average. () Significant. () Absolute.
10) What are the main restrictions of access to spaces and activities at the school encountered by handicapped
students and teachers?
11) Do you have any specific difficulties in dealing with the handicapped student that you consider might be solved
or improved if another resource, service or adaptation was implemented?
() Yes () No
If Yes, which one?
12) Do you have any suggestions that might improve the process of ordering, adapting, the delivery and follow-up
of the resources for handicapped people?