

INCLUSION OF STUDENTS WITH VISUAL IMPAIRMENT IN THE PUBLIC SCHOOL SYSTEM IN PORTUGAL¹

Začlenenie žiakov so zrakovým postihnutím do systému verejných škôl v Portugalsku

João Paulo Saraiva,² Anabela Cruz-Santos³

Abstract: The Portuguese public education system provides two types of settings for students with visual impairment: reference schools and regular inclusive schools. This article addresses the current legal framework underlying the inclusion of students with disability in Portugal and describes the features each one of these settings holds regarding (i) the available resources, (ii) their location, (iii) eligibility criteria, and (iv) the curriculum provided to students with visual impairment. Data was obtained from a government agency responsible for collecting and statistically analyze all national data related to education. The findings illustrate that, in the first schooling years, less than half of the students with visual impairment have attended a reference school, mostly in the Northern and Lisbon regions. These data stress the need for more studies that lead to better understanding of the reasons that underlie the choices of families regarding the educational context attended by their visually impaired children, and their conclusions should serve the competent authorities as a guiding tool for a possible reformulation or reorientation of inclusive policies.

Keywords: European Portuguese speaking children, Visual Impairment, Inclusive Education, Reference School, Inclusion law.

Abstrakt: Portugalský systém verejného vzdelávania poskytuje študentom so zrakovým postihnutím dva typy prostredí: referenčné školy a bežné inkluzívne školy. Tento článok sa zaoberá súčasným právnym rámcom, ktorý je základom inklúzie študentov so zdravotným postihnutím v Portugalsku, a opisuje vlastnosti, ktoré má každé z týchto nastavení, pokiaľ ide o dostupné zdroje, ich umiestnenie, kritériá oprávnenosti a učivo poskytované žiakom so zrakovým postihnutím. Údaje boli získané od vládnej agentúry zodpovednej za zber a štatistickú analýzu všetkých národných údajov týkajúcich sa vzdelávania. Zistenia ukazujú, že v prvých školských rokoch menej ako polovica žiakov so zrakovým postihnutím navštevovala referenčnú školu, väčšinou v severných a lisabonských regiónoch. Tieto údaje zdôrazňujú potrebu viacerých štúdií, ktoré povedú k lepšiemu pochopeniu dôvodov, ktoré sú základom výberu rodín, pokiaľ ide o vzdelávací kontext, v ktorom ich deti so zrakovým postihnutím navštevujú, a ich závery by mali slúžiť kompetentným orgánom ako vodiaci nástroj pre možné preformulovanie alebo preorientovanie inkluzívnych politík.

Kľúčové slová: európske portugalsky hovoriace deti, zrakové postihnutie, inkluzívne vzdelávanie, verejná škola, zákon o inklúzii.

¹ Prijaté do redakcie/Paper submitted: 09. 07. 2021

² João Paulo Saraiva, University of Minho, Institute of Education, Campus de Gualtar, 4715 Braga, Portugal. E-mail: jps@ie.uminho.pt. Personal information are published with a written consent of the author.

³ Anabela Cruz-Santos, assoc. prof., Ph.D., University of Minho, Institute of Education, CIEd-Research Centre on Education, Campus de Gualtar, 4715 Braga, Portugal. E-mail: acs@ie.uminho.pt. Personal information are published with a written consent of the author.

Introduction

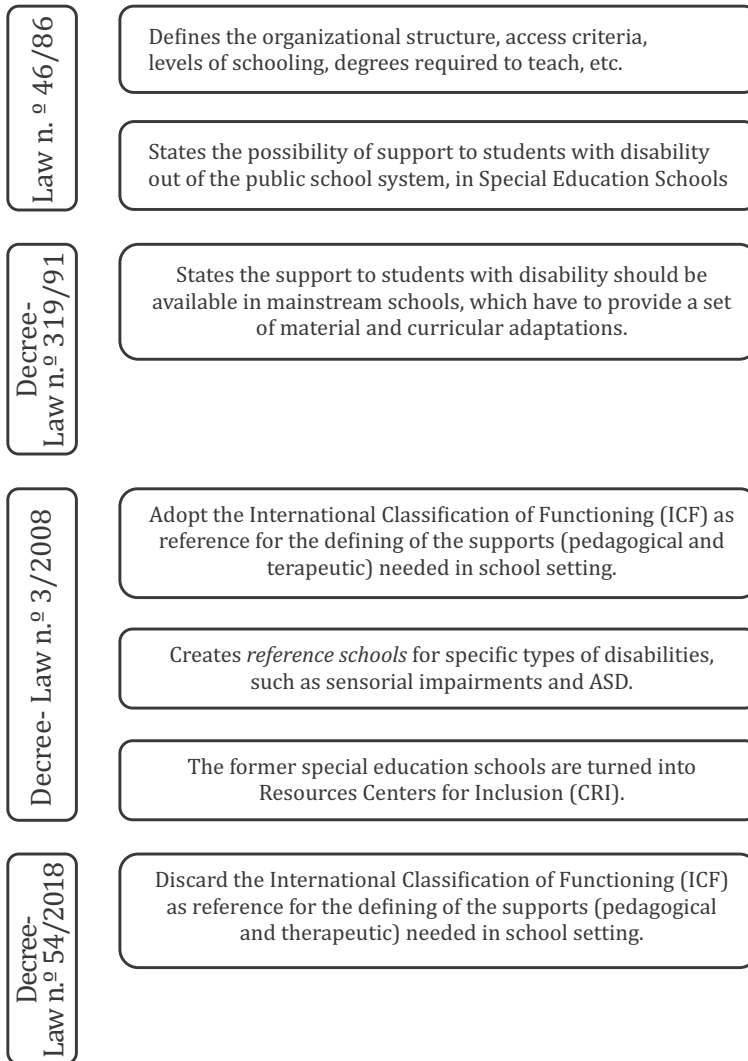
Currently, it is estimated there are about 36 million blind people worldwide (Bourne et al., 2017). In Portugal, the most recent data point to more than 27 thousand people that have this disability (National Institute of Statistics, 2011⁴). The access to education by people with this disability is advocated in international documents, ratified also by Portugal, like Salamanca Statement by UNESCO (1994), which guidelines appeal for schools to be able to accommodate all children with special needs, regardless their physical, sensorial, intellectual, social, emotional and/or linguistic condition. For a person with a visual impairment, the constraints caused on the ability to function independently, by the limitation felt in performing the most varied daily tasks (Chia, Wang, Rochtchina, Smith, Cumming and Mitchell, 2004), highlight the importance of areas such as education and (later) employment as essentials for the development and improvement of the quality of life of these people (Khorrami-Nejad, Sarabandi, Akbari and Askarizadeh, 2016). Regarding education, governments should be able to provide all the legal and pedagogical support needed to a student with this sensorial lost to firstly feel included into the educational system and, furthermore, be able to develop all their potential. In the case of Portugal, this assumption leads to some questions such: i) which is the legal framework that has been granting the inclusion of students with disability into the Portuguese educational system? ii) regarding students with visual impairments, which are the educational settings the Portuguese educational system provides them? iii) which are the main features that distinct these two educational settings? iv) which eligibility criteria must be fulfilled for a student with visual impairment to receive the specific educational support granted by law?

The Portuguese recent legislation piece is at the moment one of the most important documents related to inclusive education, by assuming a key role on public policies that assure the right of disabled people to education, recognizing the need to include children/adolescents with special needs into the mainstream educational system. However, to reach inclusive education in Portugal, a long path was carried out during the last four. At the beginning of the 21st century, the Convention on the Rights of Persons with Disabilities (2006) emerged as the first international treaty in which the rights and duties of all human beings were defined. Regarding disability, article 24 describes the State-members' obligations when it comes to promote equal opportunities, as well as to assure the proper and necessary support to the education of those people. Through Scheme 1, it is possible to realize in a timeline graphic representation,

⁴ The most recent statistics available on the number of visually impaired people living in Portugal refer to 2011 is because the collection of these census data by the National Institute of Statistics (INE) takes place, in Portugal, every 10 years and always in the months of April and May of the first year of each decade. According to INE, updated information on the population with disabilities will only be made available as final result of the 2021 censuses only in the 4th quarter of 2022.

how the legal framework concerning the support to students with disability have evolved throughout the last 4 decades in Portugal.

Scheme 1 Special Education' timeline in Portugal in the last 40 years.



(Source: our own compilation)

The public education system in Portugal is regulated by the Law No. 46/86, where its purposes, access criteria, levels of schooling, degrees required to teach, among many other related issues, are settled. One of these regards the support that must be provided to students with disabilities (articles 16, 17 and 18) and

the possibility of that support to be held by institutions other than the public school when proven necessary. Later, in 1991, the enactment of the Decree-Law No. 319 settled the special education as a service that should be available in mainstream schools, thus providing the student with disability a more effective integration in the educational community and, consequently, in the society.

However, in the 21st century, through the Decree-Law No. 3/2008, Portugal redefined its special education policy, shifting into an “one track approach”. This new legislation determined that students with disabilities should be included into the mainstream education system and, at the same time, the former special education institutions these students had attended until then should be turned into Resource Centers for Inclusion (CRI), which has been working since then as specialized services existing in the community, licensed and funded by the Ministry of Education, which through a partnership support and intensify the school’s capacity to promote the educational success of all students, by carrying out complementary therapies, such as psychological support, speech therapy, occupational therapy, physiotherapy, etc. This resolution represented an ultimate break towards the segregation model featured by those institutions, by adapting them to suit into an inclusive model in partnership with the mainstream schools. Later, in order to better respond to the needs of students with specific disabilities, the Decree-Law no. 3/2008 created special education units within traditional mainstream schools, designating them as reference schools with different features: (i) structured teaching units for education of students with autism spectrum disorders; (ii) specialized support units for education of students with multiple disabilities and congenital deaf-blindness; (iii) reference schools for bilingual education of deaf students; (iv) reference schools for blind and low vision students; (v) reference schools for early childhood intervention. A reference school works like a “hub” to where students with visual impairments daily travel to attend a mainstream curriculum and a complementary special education program where a teacher of students with visual impairments (TVI) is located throughout the school day. Students attending this kind of school spend most of their school day with similar age and disability peers in mainstream classes, but, beyond these, have scheduled classes with their TVI in resource rooms for specialized instruction in skills related to their visual impairment, like reading/writing in Braille, guiding and mobility, sports like goalball, etc. Contrasting with this educational setting and alternatively, there are regular schools, where the students with visual impairments attending, however, are served by itinerant teachers, who are TVIs who travel within a school district or local education agency to meet with students who are attending the local school that their siblings and neighbors also attend. Students are either pulled from the classroom in which they are usually enrolled for these services or the TVI provides those services in the child’s assigned classroom.

Recently, the Decree-Law no. 54/2018 came to establish a commitment to inclusive education, defined by UNESCO (2009) as a process that should aim to respond to the diversity of students’ needs, by increasing the participation

of all in the learning and life of the school community, and reinforcing the importance specialized schools may have to achieve these goals. The drop out of the International Classification of Functioning, Disability and Health (ICF) (WHO, 2001) as basis to outline the most suitable educational responses to be implemented, represents another significant shift from a medical model to a more pedagogical approach this new legal framework has settled.

Concerning the location, Portugal continental shelf is constituted by 18 districts (Figure 1) and reference schools are usually based in each district capital. In Portugal, schools from different schooling levels and geographically close form a school cluster and those reference schools work as specialized units within these school clusters. In the case of students with visual impairments, those school cluster are designated as *Reference Schools for Teaching Blind or Low Vision Students* (EREACBV). Like any public schools of mainstream education in Portugal, reference schools are under the supervision of the Directorate-General for Education (DGE), an entity under the jurisdiction of the Ministry of Education, and funded by the State Budget.

According to the Directorate-General of Education and Science Statistics (DGESS), which is a government agency that provides official statistical information in the area of education, science, technology and information society, there are currently 32 reference schools for students with visual impairments, spread by 17 out of the 18 districts of the continental shelf of Portugal, being Faro the only district where there is no reference school for these students.

Regarding the eligibility criteria, the Decree-Law No. 43991/1969 sets the boundaries within which a person should be considered as visually impaired for all health, legal and educational purposes. Therefore, whoever has a loss of vision can be framed within a broad spectrum, corresponding to *low vision*, a rate of acuity between 0.05 and 0.3 and *blindness*, a visual acuity less than 0.05 or a visual field less than 10° around a fixing point. The low vision concept yet includes two categories, *low moderate vision* (related to visual acuity between 0.3 and 0.1), and the *low severe vision* (related to visual acuity between 0.1 and 0.05).

In terms of educational support materials available to students with visual impairment, government Resolution no. 7197/2016 lists a set of specific resources whose supplying, adaptation, maintenance or renewal the State is responsible to provide. These materials encompass support devices for Braille training (handwriting, typewriters, notepads, word processing software), support equipment for orientation skills development, lenses and magnification systems, reading support equipment, computers, printers, joysticks, etc.

Besides the mainstream curriculum a blind student should to accomplish like any other student, DGE defined a set of extracurricular skills those students must learn and develop so they become able to conquer the autonomy needed to success in school and throughout their lives (Mendonça, Miguel, Neves, Micaelo, & Reino, 2008). Those skills encompass 5 main areas: Vision training, Braille Literacy, Information and Communication Technologies, Orientation and Mobility, and Daily Life Activities.

According to data from DGEED, related to the academic year 2017/2018 and referring only to students with blindness, since data related to students with low vision are not available, we can observe, through Table 1, that they are enrolled in the system teaching public 184 students, of which 75 (41%) attend reference schools, the majority of whom are attending the first and third cycles of schooling.

Table 1 Number of Students by Type of School Attended and Level of Schooling

	Basic Education			Secondary Education (10 th – 12 th grades)
	1st Level (1 st – 4 th grades)	2nd Level (5 th and 6 th grades)	3rd Level (7 th – 8 th grades)	
Reference School for Blind or Low Vision Students	15	11	28	21
Mainstream School	47	20	28	14

(Source: Directorate-General of Education and Science Statistics, 2018)

Regarding the attendance in reference schools to students with visual impairment and how this is related with the country demography, as we can see in table 2, some asymmetries are noted, with the Northern and Midwest regions (most industrialized) concentrating more than half of all students with visual impairment who attend these schools, while in Lisbon Metropolitan Area (GDP per capita above European Union average) holds more than one third of those students and in Alentejo (lowest population density) that rate is just residual. Regardless of the region, we also observe that more than half of students are in the final stage of their compulsory education, which means there will be a gradual decrease in the number of students enrolled in reference schools in the following years.

Table 2 Students with Visual Impairment Attending Reference Schools by Geographic Area and Level of Schooling

Region	GLOBAL ⁽¹⁺²⁾ (N)	Basic Education ⁽¹⁾ (%)	Secondary Education ⁽²⁾ (%)
		1 st – 9 th grades	10 th – 12 th grades
NORTHERN	26	30	60
MIDSTWEST	16	33	50
LISBON	27	49	71
ALENTEJO	6	43	60
ALGARVE	0	0	0

(Source: Directorate-General of Education and Science Statistics, 2018)

Discussion

The present study aimed to provide an overall insight into the education of students with visual impairment in Portugal, focusing on the legal framework that guarantee educational support to these students, the school settings these students can attend, where the most specialized educational settings are located and the number of students with blindness or low vision that attended mainstream or specialized school settings in the 2017/2018 school year.

The Portuguese education system has been seeking to continuously improve throughout the last decades, by providing to all learners not only access to education during the 12 years of compulsory schooling, enacted in 2009 (Law no. 85/2009), but also adopting inclusive policies that allow public schools to become places where disabilities could be seen as a sign of diversity instead of difference. However, this goal may not be achieved if inclusion is understood merely by placing students with disabilities within mainstream classes, ignoring the structural changes that previously should take place on issues like organization, curriculum, teaching strategies, etc. (United Nations, 2016). One of these changes, enacted in 2006 through the Decree-Law no. 20, concerned the creation of specialties within the Special Education Services, according to the type disability presented by a student. Thus, Special Education teachers are specialized in supporting students with cognitive and/or motor disabilities (E1), students with hearing impairments or communication, language and/or speech disabilities (E2), or students with visual impairments (E3).

Regarding the location, some disadvantages are point out to specialized schools, such as the long distances students often have to travel to attend such schools, which implies, in most cases, waking up very early and arriving home too late every day (McMahon, 2014), depriving these students of a broader family life and, consequently, subjecting them to a relevant physical and emotional strain. Although the low incidence, the complexity in supporting students with visual and hearing impairments led to the development of reference schools, which locations were chosen based on data information, but also took into account proximity criteria and territorial coverage (Brocardo, Pereira, & Lourenço, 2009).

Concerning the number of students with blindness attending the public school system in the school year 2017/2018, representing a bit over 0,2% of the whole disability school age children attending the public educational system at that time (DGESS, 2018). As for the type of school attended by students with visual impairments in that school year, most families chose a regular school, which may be explained by constraints arising from the location of the nearest reference school, as discussed above, or due to beliefs that students attending these schools generally have less contact with their non-disabled peers than those attending regular schools. The opinions towards to which educational setting offer the most suitable support to a student with visual impairment diverge, insofar some students with visual impairments, who attended mainstream classrooms, reported a general disinclination toward their school and felt they had fewer social interaction opportunities when compared to similar students who attended special schools for students with visual impairments (Gray, 2010), while parents

of students with visual impairment have already stated specialized schools had more comprehensive services, resources, and opportunities for their children than the regular school near to their homes (Corn, Bina & DePriest, 1995).

Despite the present study have addressed how the education for students with a visual impairment works in Portugal, focusing some issues, like the legal framework that rule their inclusion process, the school settings the public education system offer to them, the eligibility criteria that must be fulfilled so those students get the specialized support they have the right to, the human and material resources granted to them by law, and descriptive data regard the attendance of students with visual impairment in each of the available settings in a given school year, it must be acknowledged some limitations that should serve as scope for future research. Thus, it would be important to understand the perceptions of parents regarding the options of existing school settings (reference schools or inclusive schools), in order to understand which factors may underlie the decision to enroll their children in one of these options: quality of education offered, resources materials, staff competence to deal with visually impaired students, distance from home, etc. Considering the geographic centrality of these schools, motivated by coverage area issues, a relevant research question would be, in the case of students who attend a reference school located far from home, to understand the advantages, disadvantages and benefits of attending this type of school. The data already illustrate that these children spend a great number of hours awake, commuting between cities (some very far from home), and less time with their siblings and/or parents during the week. Thus, based on the opinion of those who live this reality, analyze whether these environments are effectively of quality for the education of these children. It would also be interesting to have the opinion of the students themselves about their satisfaction and future perceptions for their transition throughout life, trying to understand how the educational context in which they are included contributes to their well-being and sense of belonging to a community. In addition, considering the current COVID-19 pandemic and the distance learning modality adopted as a result of the mandatory lock down, it would be relevant to understand how these students have been supported since then and if there are differences between students who attend the reference schools and regular inclusive schools.

Despite the questions that remained to be asked, this study is a starting point regarding the knowledge about the legal framework and educational responses available to students with visual impairments in Portugal. On the other hand, the descriptive data presented, that reflect the choice of families regarding the type of school attended by their children, can - and should - contribute to a reflection, by the competent authorities, on the effective fulfillment of the assumptions where rely the creation of reference schools.

Acknowledgments: This work was financially supported by Portuguese national funds through the FCT (Fonudation for Science and Technology within the framework of the CIEC(Research Center for Child Studies of the University of Minho) projects under the references UIDB/00317/2020 and UIDP/00317/2020

REFERENCES

- BOURNE, R. R. A., FLAXMAN, S. R., BRAITHWAITE, T., CICINELLI, M. V., DAS, A., JONAS, J. B., KEEFFE, J., KEMPEN, J. H., LEASHER, J., LIMBURG, H., NAIDOO, K., PESUDOV, K., RESNIKOFF, S., SILVESTER, A., STEVENS, G. A., TAHHAN, N., WONG, T. Y., & TAYLOR, H. R., 2017. Magnitude, temporal trends, and projections of the global prevalence of blindness and distance and near vision impairment: A systematic review and meta-analysis. In: *The Lancet*, 5, pp. 888 – 897.
- BROCARD, J., PEREIRA, F., & LOURENÇO, M., 2009. *Desenvolvimento da educação inclusiva: Da retórica à prática. Resultados do Plano de Acção 2005-2009*. Accessed on February 7th. Available on: https://www.dge.mec.pt/sites/default/files/EEspecial/publ_educ_inclusiva_resultados_2009_2010.pdf.
- CHIA, E., WANG, J., ROCHTCHINA, E., SMITH, W., CUMMING, R., & MITCHELL, P., 2004. Impact of bilateral visual impairment on health-related quality of life: the Blue Mountains Eye Study. In: *Investigative Ophthalmology & Visual Science*. Vol. 45, Issue 1, pp 71 – 76.
- CORN, A., BINA, M., & DEPRIEST, L., 1995. The parent perspective on schools for students who are blind and visually impaired: National study. In: *Association for Education and Rehabilitation of the Blind and Visually Impaired*.
- Decree-Law No. 3/2018. Republic Diary, 1st Series, No. 4, January 7th. Ministry of Education, Lisbon, pp 154 – 164.
- Decree-Law No. 54/2018. Republic Diary, 1st Series, No. 129, July 6th. Ministry of Education, Lisbon, pp 2918 – 2928.
- Decree-Law No. 319/1991. Republic Diary, Series 1-A, No. 193, August 23th. Ministry of Education, Lisbon, pp 4389 – 4393.
- Decree-Law No. 49331/1969. Govern Diary, 1st Series, No. 253, October 28th. Ministry of Health and Assistance, Lisbon, pp 1462 – 1462.
- Decree-Law No. 20/2006. Republic Diary, Series 1-A, No. 22, January 31st. Ministry of Education, Lisbon, pp 746 – 765.
- D-maps. (2007). Portuguese Republic: Outlines, districts, names. Available on: https://d-maps.com/carte.php?num_car=24989&lang=pt.
- Directorate-General for Education and Science Statistics. Retrieved in 2018, December 28th. Available on: <http://www.dgeec.mec.pt/np4/PREVISIOES/>.
- GRAY, C., 2010. Visual impairment: The educational experiences of young people in Northern Ireland. In: *Educational & Child Psychology*. Vol. 27, Issue 2, pp 68 – 78.
- KHORRAMI-NEJAD, M., SARABANDI, A., AKBARI, M.-R., & ASKARIZADEH, F., 2016. The Impact of Visual Impairment on Quality of Life. In: *Med Hypothesis Discov Innov Ophthalmol*. Vol. 5, Issue 3, pp 96 – 103.
- Law No. 46/1986. Republic Diary, 1st Series, No. 237, October 14th. Republic Assembly, Lisbon, pp 3067 – 3081.
- Law No. 85/2009. Republic Diary, 1st Series, No. 166, August 27th. Republic Assembly, Lisbon, pp 5635 – 5636.
- Mapa geográfico representando os distritos de Portugal. Adapted from “As coleções de braquiópodes paleozoicos do Museu Geológico do Laboratório Nacional de Energia e Geologia, Lisboa, Portugal” by M. Schemm-Gregory and M. H. Henriques, 2014, DComunicações Geológicas, 101(1), p. 84. Copyright 2013 by the National Laboratory of Engineering and Geology.
- McMAHON, E., 2014. The Role of Specialized Schools for Students with Visual Impairments in the Continuum of Placement Options: The Right Help, at the Right Time, in the Right Place. In: *Journal of Visual Impairment & Blindness*. Vol. 108, Issue 6, pp 449 – 459.

- MENDONÇA, A., MIGUEL, C., NEVES, G., MICAELLO, M., & REINO, V., 2008. *Alunos cegos e com baixa visão – Orientações curriculares*. DGIDC. Curricular (Ed.). Lisboa: Ministério da Educação.
- PORDATA, 2013. *Nomenclature of Territorial Units for Statistical Purposes*. Available on: <https://www.pordata.pt/O+que+sao+NUTS>.
- Resolution No. 7197/2016. Republic Diary, 2nd Series, No. 105, June 1st. National Institute of Rehabilitation, Lisbon, pp. 17168-17185.
- United Nations Committee on the Rights of Persons with Disabilities (CRPD), General comment No. 4 (2016), Article 24: Right to inclusive education, 2 September 2016, CRPD/C/GC/4. Available on: <https://www.refworld.org/docid/57c977e34.html> [accessed 9 February 2021].
- World Health Organization, 2007. International Classification of Functioning, Disability, and Health: Children & Youth Version: *ICF-CY*. World Health Organization.