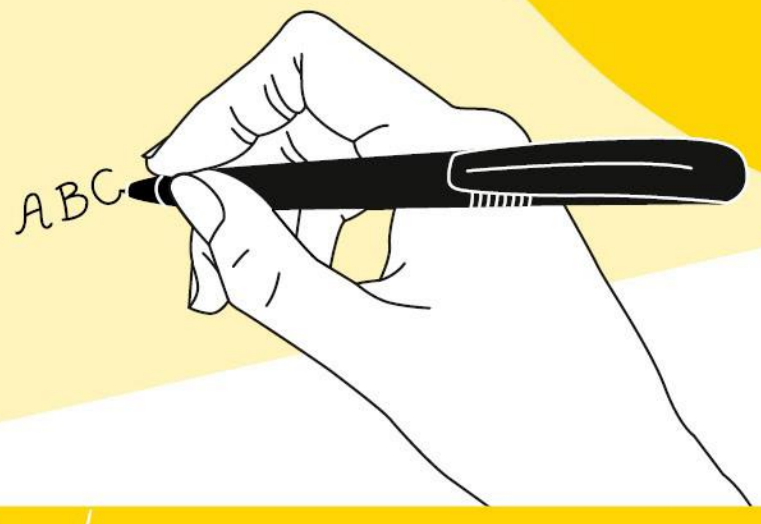
Good practise

Catalogue



With the support of
Erasmus+ Programme
of the European Union

Inclusion in Europe through Knowledge and Technology

Project no: KA201-2015-012

Catalogue of Good Inclusion Practises

Contents

Inclusion in Europe through Knowledge and Technology

Information on the fundamental principles, practices, educational material and teaching aids used to teach various subjects to students with special needs are few and far between. In some cases, material has been prepared for internal use at specialised schools or in other closed environments. In other cases, knowledge has been passed from teacher to teacher as part of workplace training.

No systematic material on pedagogical principles, practices, educational material and teaching aids exist for areas such as teaching first language teaching, foreign language teaching, mathematics and music for the blind, partially sighted and dyslexic.

With this in mind, the goal of this European project was to further develop, implement and disseminate good practices in the area of inclusive education and learning technologies by delivering three primary components: *Teaching Guides*, Guide on g*ood practices Inclusive learning and Teaching* and *SMART E-learning objects*.

Teaching guides

In completing the project, RoboBraille partners have created a series of twelve educational guides covering fundamental principles, practices, educational material and teaching aids covering first language teaching, foreign language teaching, mathematics and music for the blind, partially sighted and dyslexic.

Inclusion guide on good practices for inclusive learning and teaching

In support of this, the project has collected and collated information on good inclusion practices in five select areas (teacher skills, alternate media, support structures, preparation for inclusion and teaching environments) which are published in this catalogue of good practices.

SMART e-learning

Finally, the project adapted a comprehensive set of educational material on the RoboBraille service prepared in the LLL LdV RoboBraille SMART project into a set of learning objects for popular e-learning platforms for web and tablet deployment.

For all materials produced by this project

Because the material covers teaching of students of various age, they are named students, learners, pupils and children. The material also reflects the different culture and level of inclusion practices of the project partners. The guide is not a substitute for formal training of teachers.

Introduction

Over the past 30 years, the right of persons with disabilities to education without discrimination and on a basis of equal opportunities with others has been recognized through a number of conventions and treaties, including the following:

- The United Nations Convention on the Rights of the Child (CRC, 1989).
- The World Declaration on Education for All (1990).
- The United Nations Standard Rules on Equalization of Opportunities for Persons with Disabilities (1993).
- The Salamanca Declaration and Framework for Action (1994).

Moreover, it is recognized that the key to achieving this right is through inclusion - a principle strongly protected by the United Nations Convention on the Rights of Persons with Disabilities (additional details are available at the following link: https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html).

In its article 24, Education, the convention calls upon state parties to ensure an inclusive education system at all levels. Upon recognizing this right, state parties must take a number of measures to ensure that persons with disabilities:

- Are not excluded from the general education system.
- Can access an inclusive, quality and free primary and secondary education in the communities in which they live.
- Are provided reasonable accommodation to their individual needs.
- Receive the support required.
- Are provided with effective individualized support measures in environments that maximize academic and social development, consistent with the goal of full inclusion.

In August 2016, the committee on the rights of persons with disabilities published a "General Comment No. 4 "2016" on article 24 of the Convention (additional details are available at the following link: http://www.ohchr.org/Documents/HRBodies/CRPD/GC/RighttoEducation/CRPD-C-GC-4.doc).

Among the concerns raised by the committee, is the fact that for many children with disabilities education is available only in settings where they are isolated from their peers, receiving oftentimes an inferior quality of provision. The committee also identified a number of barriers that impede access to inclusive education for children with disabilities including:

- Failure to understand or implement the human rights model of disability.
- Persistent discrimination against persons with disabilities.

- Lack of knowledge about the nature and advantages of inclusive and quality education.
- Lack of disaggregated data and research.
- Lack of political will, technical knowledge, and capacity in implementing the right to inclusive education including insufficient education of teaching staff.
- Inappropriate and inadequate funding mechanisms to provide incentives and reasonable accommodations for inclusion of students with disabilities.

Like for all persons with disabilities, over these past 30 years, the rights of persons with visual impairments to education without discrimination and on a basis of equal opportunities with others, has also undergone major changes. In many countries, attention was shifted from educational settings of exclusion (attending a special school for the visually impaired), to segregation (being separated in a different classroom or school because of their disability), to mainstreaming (placed in a regular class during specific time periods), to integration (attending a mainstream school with support) and finally to inclusion: an environment that offers a participatory learning experience for all students within the same relevant age range.

This catalogue gives the opportunity to learn from each other and to share good practice examples in information in five areas of inclusion practices:

1. Teacher skills,
2. Support structures,
3. Alternate media,
4. Preparation for inclusion and,
5. Teaching environments.

It also includes examples of funding models on three of these areas in some European partner countries.

Examples presented in this guide are mainly from the following countries:

- **Italy** – a country with a very long history in the inclusion of students with visual impairment.
- **Cyprus** – a small country where an education law for children with special needs came into effect in 1999 and since then students with visual impairment are educated in the mainstream schools of their neighbourhood.
- **Bulgaria** – a country where both the segregation and inclusion models are implemented.

Teacher education and competencies

The teachers' education and competencies can play a crucial role in the removal of barriers that might deprive inclusive education for students with visual impairment. Professional involved in the education of a student with visual impairment, have their own clearly defined role and work closely together to ensure that within the school environment there is the appropriate political will and the technical knowledge and capacity, in implementing the rights to inclusive education for the students with visual impairment. This section describes the educational qualifications and competencies of all professionals involved in the learning process of a student with visual impairment, as well as the availability and context of training workshops and courses.

Qualifications of Visual Impairment Support Teachers (peripatetic teachers)

Visual impairment support teachers (peripatetic teachers) are qualified professionals in the area of Special Education and in particular the Education of the Visually Impaired.

They are holders of either post graduate degrees, bachelor of philosophy or master in education degrees related to the education of the visually impaired.

They acquire these degrees from accredited universities in various European countries (such as Italy, Hungary, and United Kingdom and most other EU countries), that have special courses on the subject and a tradition for training teachers in the field.

These professionals are further supported by teams of other educators and teachers with degrees in specific areas such as mathematics, languages, sciences, etc., who do not have a specialization in the education of children with visual impairment.

Qualifications of classroom/mainstream teachers in the inclusive setting

Depending on the level at which they teach (primary or secondary education), teachers are mostly holders of University Degrees in Education.

For Secondary Education teachers have degrees in specific teaching subject, such as Mathematics, Language, and Information Technology etc.

Some teachers in both levels of education may also obtain a Master's Degree in Inclusive Education.

Training workshops available for mainstream classroom teachers

Classroom teachers should attend workshops in subjects related to the Education of the Visually Impaired.

All workshops are approved from the Ministry of Education in each country.

Workshops are provided by:

- Resource centres for the visually impaired

- Special Schools for the visually impaired
- Universities with programs for the education of the visually impaired
- Non-profit organizations for people with visual impairment
- Private companies

Duration varies from 20 to 50 academic hours

Subjects offered include:

- Plenary sessions.
- Inclusion of students with visual impairment.
- Braille literacy.
- Eye conditions, and their educational implication.
- The visually impaired student in the classroom (adaptations, in the physical environment and within the classroom, in the teaching methods, in the teaching materials).
- IT and assistive technology.
- Experiencing blindness and low vision (interactive workshops with simulation exercises).
- The daily life of persons who are blind or have low vision (often demonstrated by visually impaired persons themselves).
- Legislation for inclusive education.
- Good practices and case studies.

In some European countries, there are also online courses available for classroom teachers (who have a visually impaired student in their classroom).

These online courses must be approved by the Ministry of Education, they are provided by private companies/organisations/universities. They are either funded by local institutions or by a subscription fee to be paid by the participant.

Support structures

Students who are certified as legally visually impaired are entitled to special support, in order to be able to follow the mainstream curriculum and be educated in the mainstream schools of their choice.

The organization providing the support services for children with visual impairment is undoubtedly a key factor for the success of their attendance/ integration.

Children with visual impairment, their families and the school units they attend, are the main recipients of these support services.

This support is offered by 'peripatetic' teachers/educator of the special school or the resource centre of their region, the department of the Ministry of Education being responsible for special education in their country or region or centres of special educational support with qualified staff to support students and their families.

Each visually impaired student is assigned to a peripatetic teacher/educator who is in charge of collaboration with the school setting to ensure that all the needs of the student that derive from the visual impairment are met.

Peripatetic teachers visit the mainstream schools on a regular basis and work together with the teaching staff and other personnel at the schools. Their role is primarily consultative and among other services include:

- Providing the teaching staff and other personnel of a school with information about the child's visual impairment and its implications to the educational procedure.
- Cooperating with all those involved in the education of the child as well as other specialists, like social workers, psychologists etc.
- Providing assistance to the classroom teachers with practical solutions that are helpful to the child (e.g. the sitting position in the classroom, the lighting of the room etc.)
- Suggestions are made for alterations in the teaching method as well as the curriculum, where that is possible, in order to meet the child's needs.
- Suggestions are also made for alterations to the general environment of the school (environmental audit) for the easiest and safest access to all areas of the school.

In addition to the support or peripatetic teacher, the visually impaired students are entitled by law to other services (differs slightly within the EU member countries):

- According to the degree of their disability, students are assigned a diversified number of support hours per week (varying from a couple of hours every day to the whole duration of class attendance).

- visually impaired students up to 2/10 visual acuity are assigned a classroom assistant/facilitator specifically trained to assist students with visual impairment.
- Every child is introduced to the necessary electronic and other technical means that they will need for their education, giving them the chance to compete with their sighted peers on equal terms.
- Training the child in the use of such electronic means and providing them with the equipment itself for use at home and/or at school, as well as technical support.
- Adaptation and preparation of teaching and other materials for the educational needs of children with visual impairment (Braille translations, embossed maps and diagrams, enlargements etc.)
- Some schools have a delegate teacher to help and monitor disability issues and related problems.

Alternate media production

The Educational material used by students as part of the learning process, should also be accessible to the student with visual impairment, to ensure their full and equal participation. This section describes all the possible ways and means one can use to produce such material, which may range from different types of paper and writing material to hi-tech assistive equipment.

But,

> *"… No amount of investment in the latest gadgetry will help the child to access the curriculum if there is not a similar investment in ensuring that (i) the equipment is appropriate to both the child and the situation and (ii) the required support is available to enable good use to be made of it*"
>
> Rita Kirkwood, 1994, University of Birmingham, School of Education
> EDSE 24: Assessment and teaching,
> Unit 8: Management of the environment

Examples of alternate media

- Enlargement of school material (books, notes, tests etc.).
- Braille transcription of school material.
- Tactile representation of any material needed for teaching purposes (e.g. math diagrams, geography maps).
- School books in accessible electronic format.
- Audio books (mp3 and/or DAISY).

Enlargement of school material

The following illustrations show a student's note book with large bold lines in A4 paper size to use either with a pencil (as illustrated in figures 2 and 3 below) or with black marker.

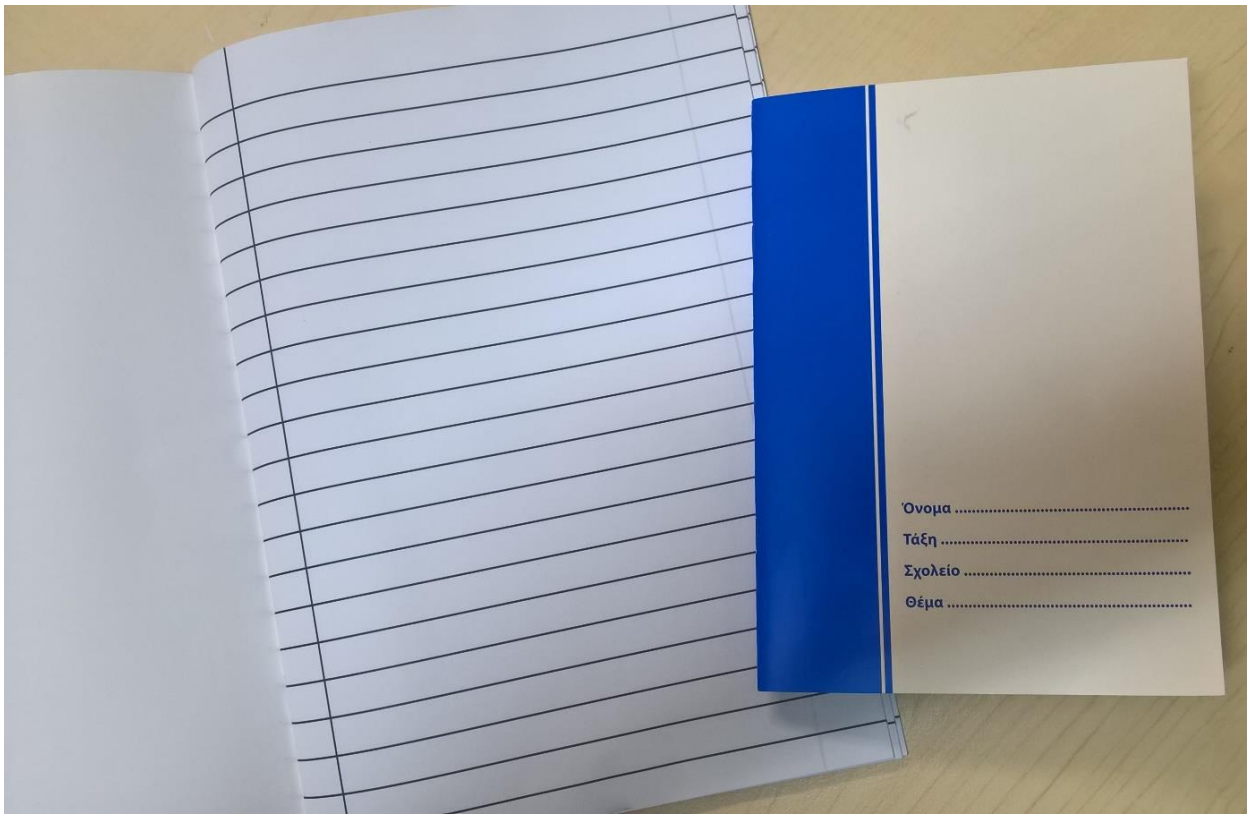


Figure 1: Illustration of student's note book in large print

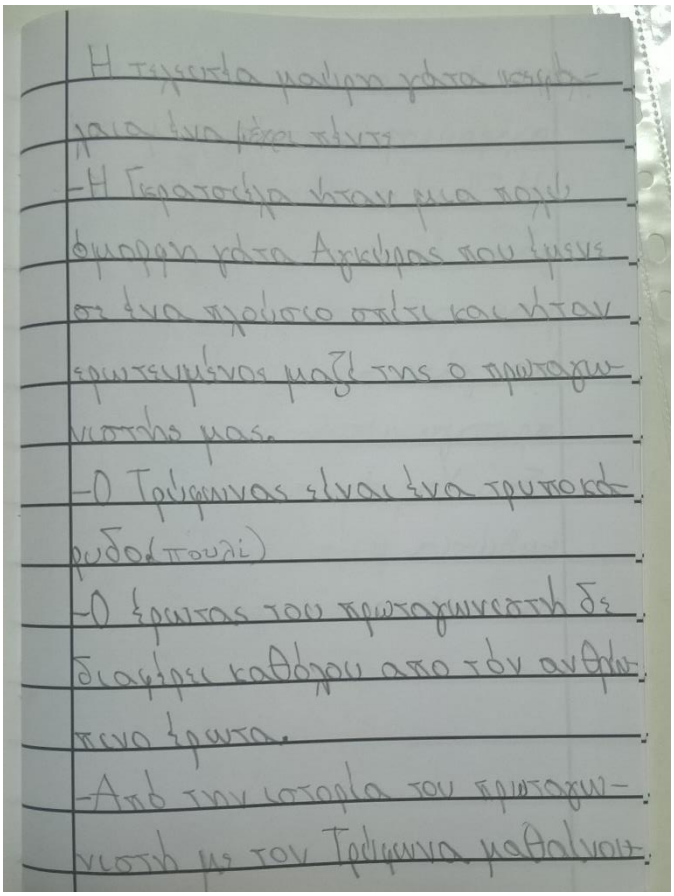


Figure 2: Large print student's note book with notes

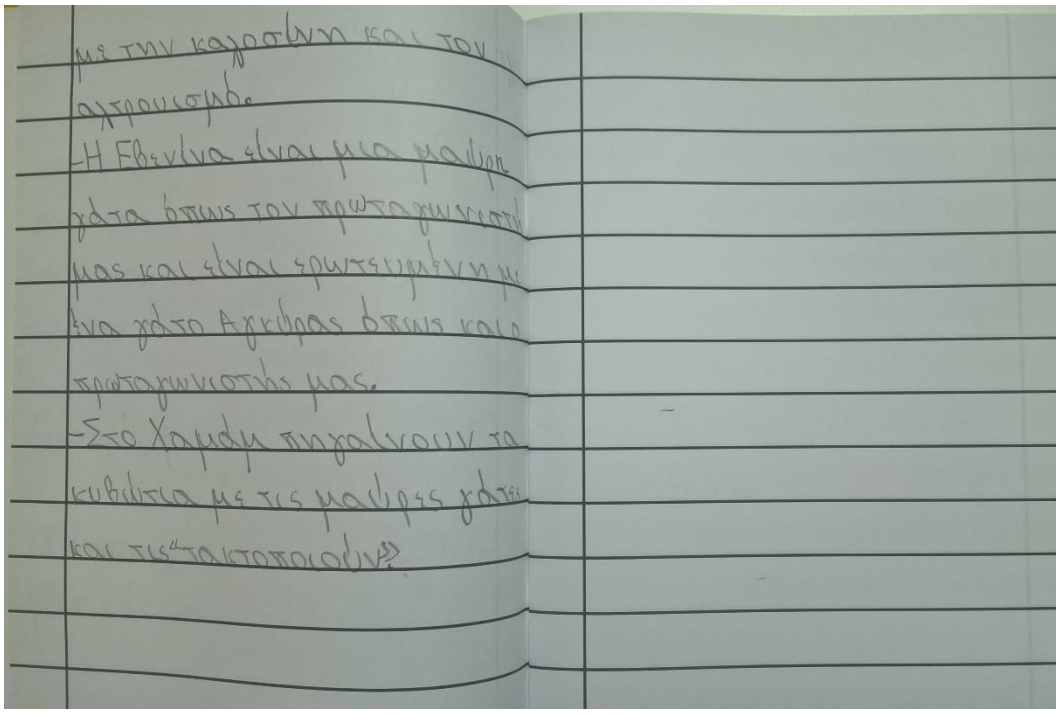
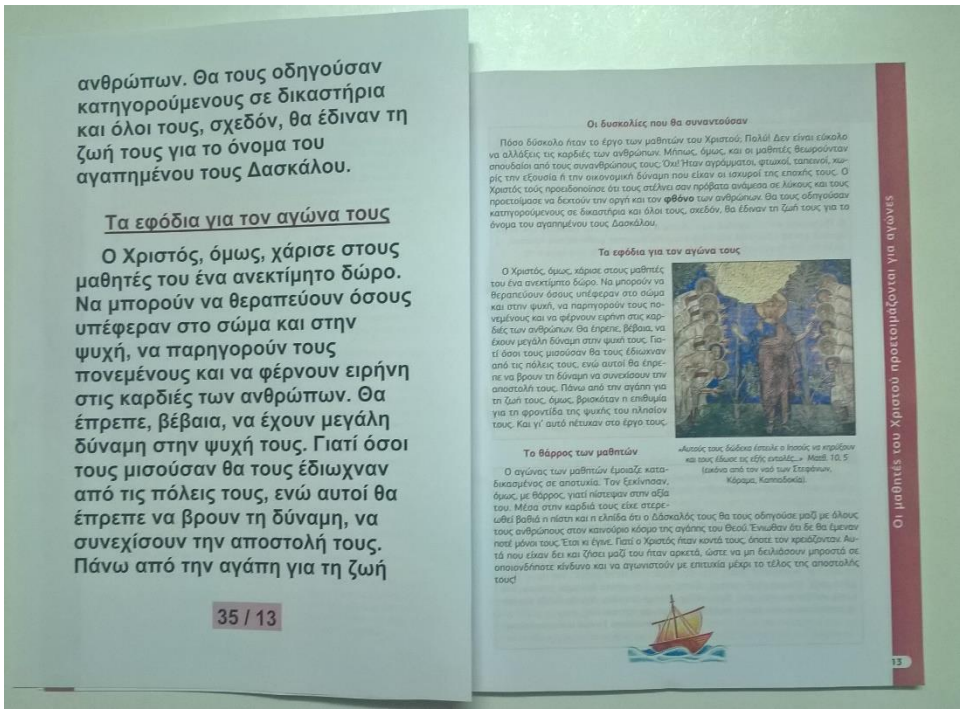


Figure 3: Large print student's note book with notes with left and right pages

Figures 4 and 5 below show examples of enlargement of a school book. Notice that there is a need of more than one A4 size page to represent one single page in the book and that the corresponding number of the normal sized text is written on the bottom of each enlarged to help the student and the teacher find the right chapter as the other children in the classroom.



ανθρώπων. Θα τους οδηγούσαν κατηγορούμενους σε δικαστήρια και όλοι τους, σχεδόν, θα έδιναν τη ζωή τους για το όνομα του αγαπημένου τους Δασκάλου.

Τα εφόδια για τον αγώνα τους

Ο Χριστός, όμως, χάρισε στους μαθητές του ένα ανεκτίμητο δώρο. Να μπορούν να θεραπεύουν όσους υπέφεραν στο σώμα και στην ψυχή, να παρηγορούν τους πονεμένους και να φέρνουν ειρήνη στις καρδιές των ανθρώπων. Θα έπρεπε, βέβαια, να έχουν μεγάλη δύναμη στην ψυχή τους. Γιατί όσοι τους μισούσαν θα τους έδιωχναν από τις πόλεις τους, ενώ αυτοί θα έπρεπε να βρουν τη δύναμη, να συνεχίσουν την αποστολή τους. Πάνω από την αγάπη για τη ζωή

35 / 13

Οι δυσκολίες που θα συναντούσαν

Πόσο δύσκολο ήταν το έργο των μαθητών του Χριστού; Πολύ! Δεν είναι εύκολο να αλλάξεις τις καρδιές των ανθρώπων. Μήπως, όμως, και οι μαθητές θεωρούνταν απουδαίοι από τους συνανθρώπους τους; Όχι! Ήταν αγράμματοι, ψαράδες, φτωχοί, ταπεινοί, χωρίς την εξουσία ή την οικονομική δύναμη που είχαν οι ισχυροί της εποχής τους. Ο Χριστός τούς προειδοποίησε ότι τους στέλνει σαν πρόβατα ανάμεσα σε λύκους και τους προετοίμασε να δεχτούν την οργή και τον **φθόνο** των ανθρώπων. Θα τους οδηγούσαν κατηγορούμενους σε δικαστήρια και όλοι τους, σχεδόν, θα έδιναν τη ζωή τους για το όνομα του αγαπημένου τους Δασκάλου.

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«Αυτούς τους δώδεκα έστειλε ο Ιησούς να κηρύξουν και τους έδωσε τις εξής εντολές...» Ματθ. 10, 5 (εικόνα από τον ναό των Στεφάνων, Κάραμε, Καππαδοκία).

Το θάρρος των μαθητών

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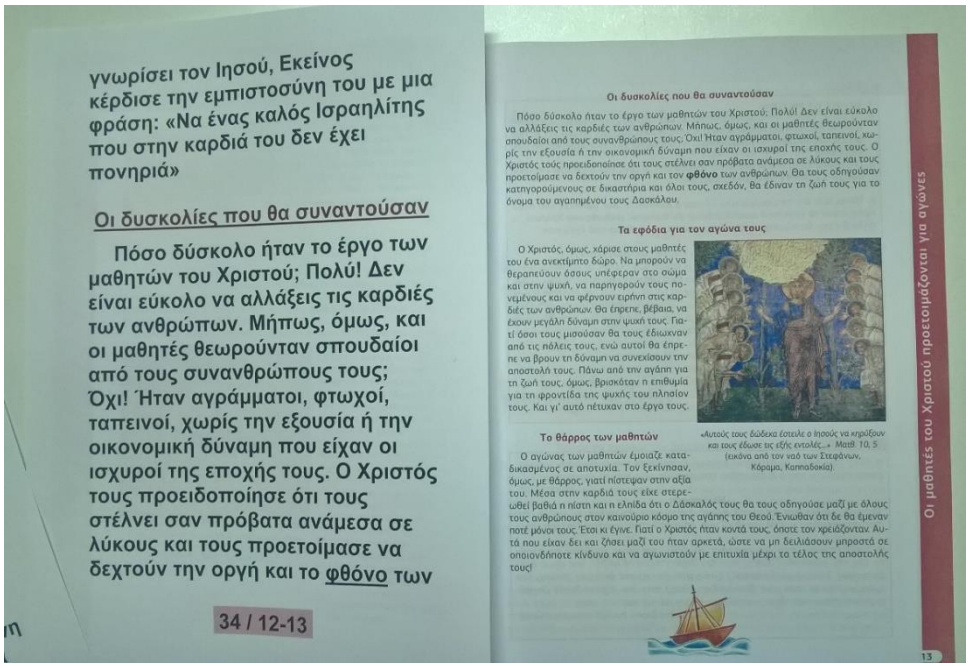
Οι μαθητές του Χριστού προετοιμάζονται για αγώνες

13

Figure 4: Illustration of book in ordinary print and large print


γνωρίσει τον Ιησού, Εκείνος κέρδισε την εμπιστοσύνη του με μια φράση: «Να ένας καλός Ισραηλίτης που στην καρδιά του δεν έχει πονηριά»

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34 / 12-13

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13

Figure 5: Illustration of book in ordinary print and large print

Braille transcription of school material

Figures 6 and 7 below show examples of a transcribed language book (first grade, elementary school) with the original on the right. The book is produced in Braille with an embosser. The support teacher writes the text that is needed with a pen to help the classroom teacher follow in the sighted copy (e.g. chapter title and page in the original copy). The sighted text is written ABOVE the Braille text so that the student's fingers are not hiding the sighted text.

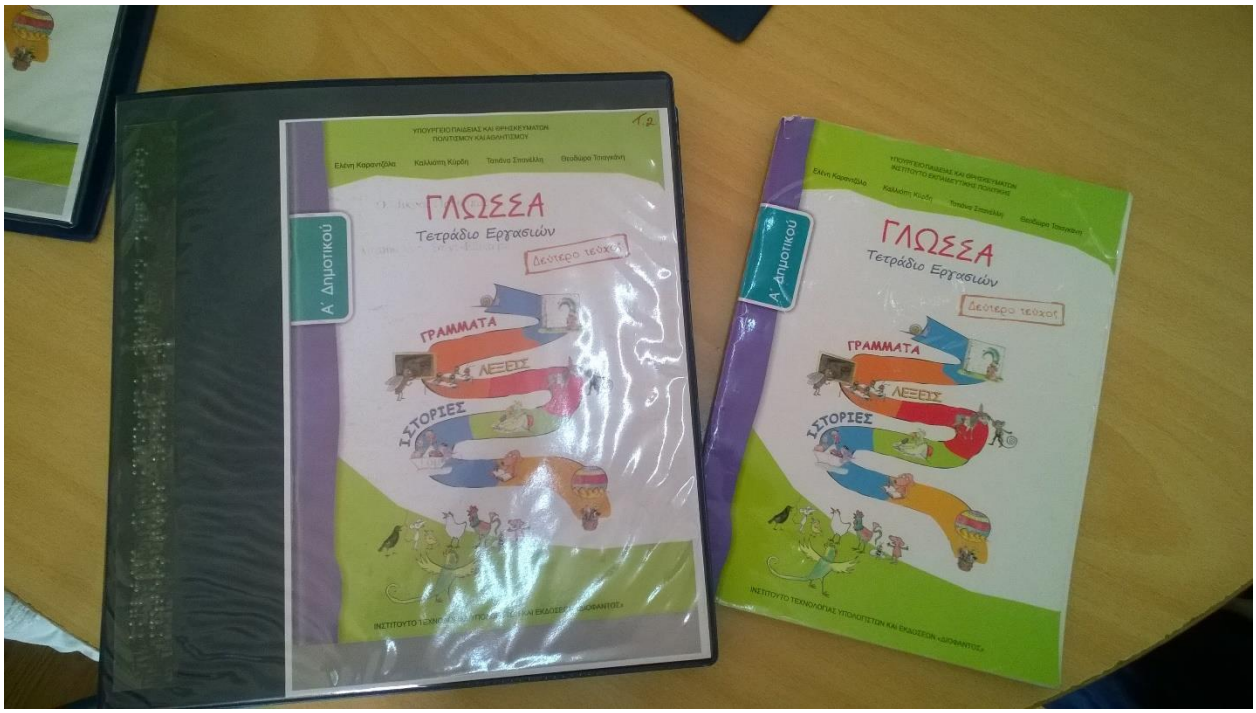

Figure 6: Example of a book transcribed in Braille

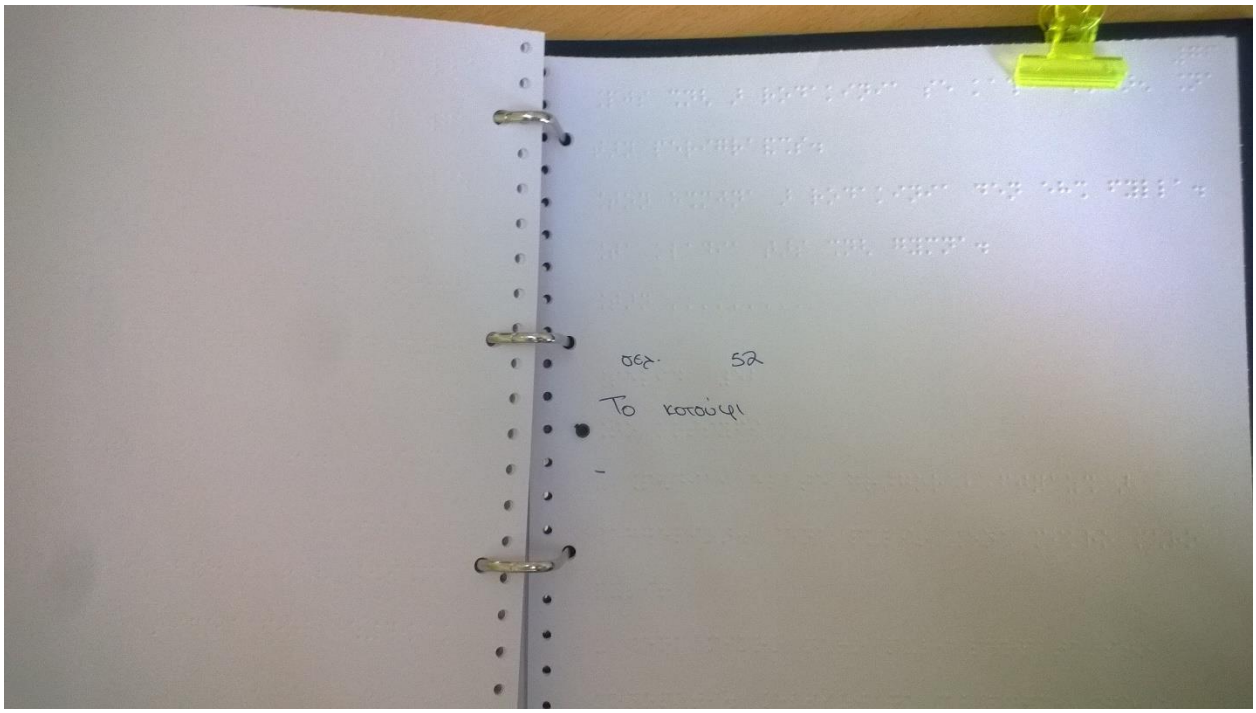

Figure 7: Example of a book transcribed in Braille

Figures 8 and 9 below show examples of exercise cards from the textbook, enlarged and laminated with Braille text written on transparent stickers for the student with visual impairment. Keeping the original text and format can help when students are working in pairs and the student with visual impairment may pair with a sighted peer. In addition, as a social aspect, the student with visual impairment may use the same material as his/her classmates.

Figure 8: Exercise cards

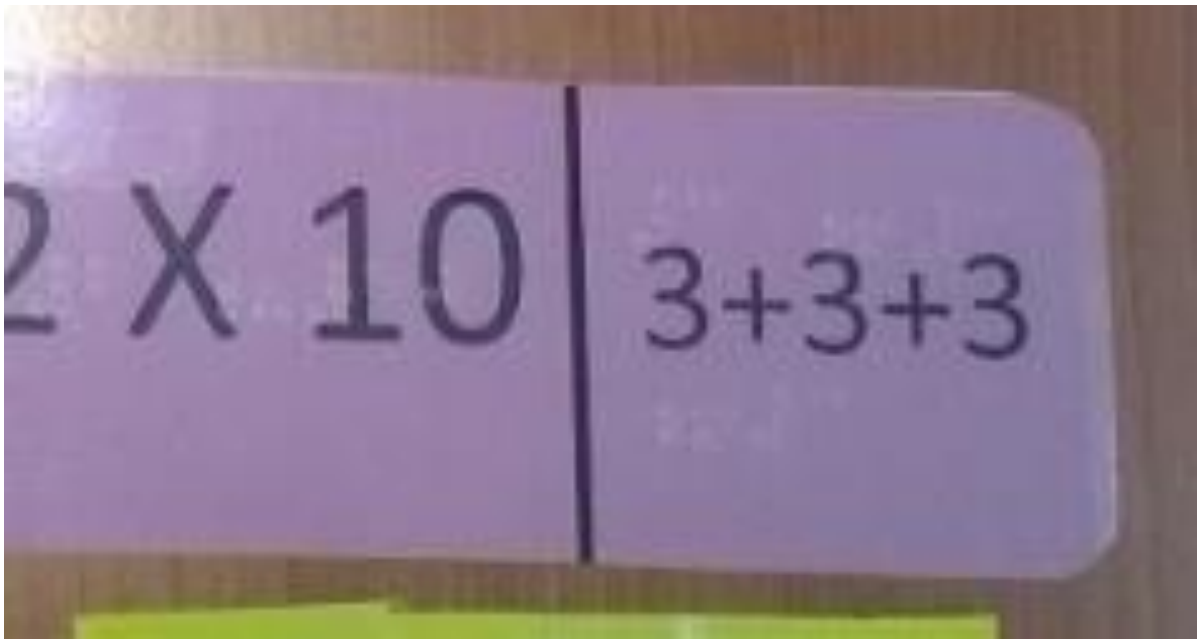

Figure 9: Close-up of exercise card

Tactile representation of any material needed for teaching purposes

Figures 10 and 11 below show examples of other material transcribed and simplified so that the student with visual impairment will be able to execute the same exercise as other children in the classroom.

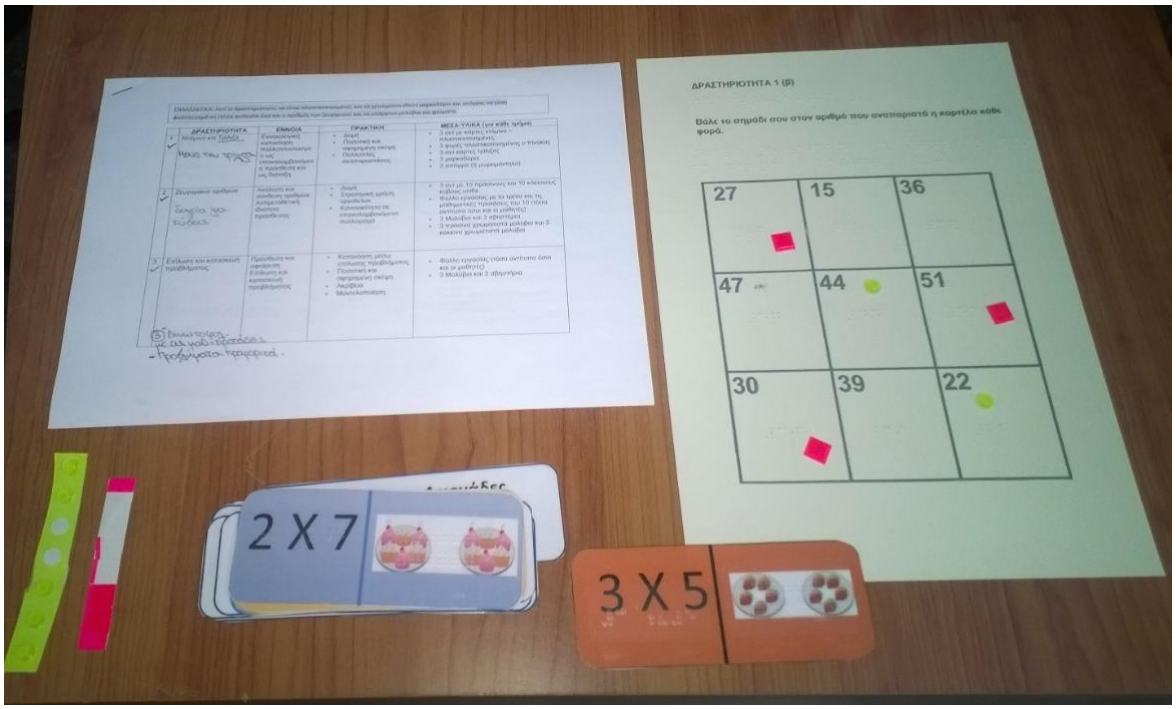

Figure 10:Print and tactile versions of the same material

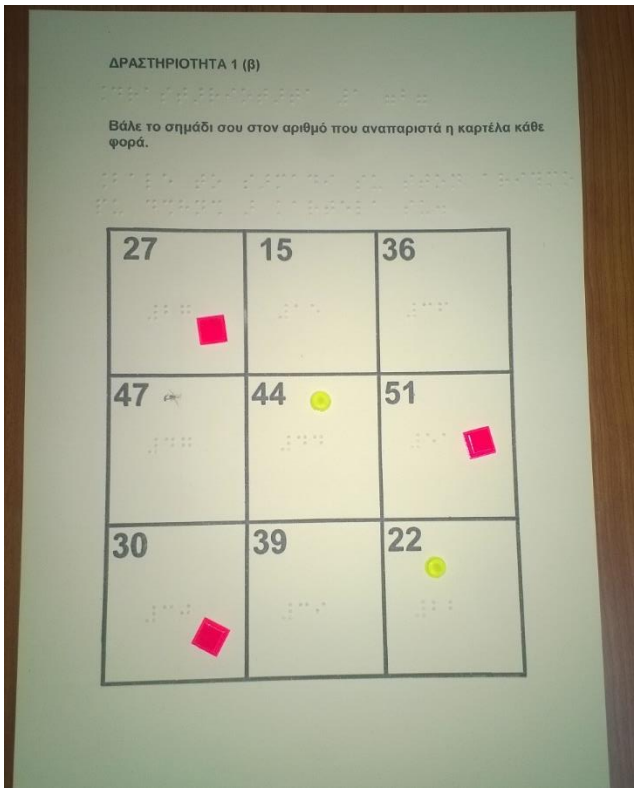

Figure 11: Tactile illustration with Braille and print

Figure 12 below shows an example where a die is adapted so that the student with visual impairment can participate in the same exercises in the same manner as his/her classmates. The die is re-made larger, the sighted print is larger, the Braille text is written on transparent sticker on top of the sighted text. In addition, there is a tactile mark on the upper right corner of each site, so that the student can easily read the Braille text.

Figure 12: Adapted die

Figure 13 below shows transparent Braille on plastic material representing fractions.

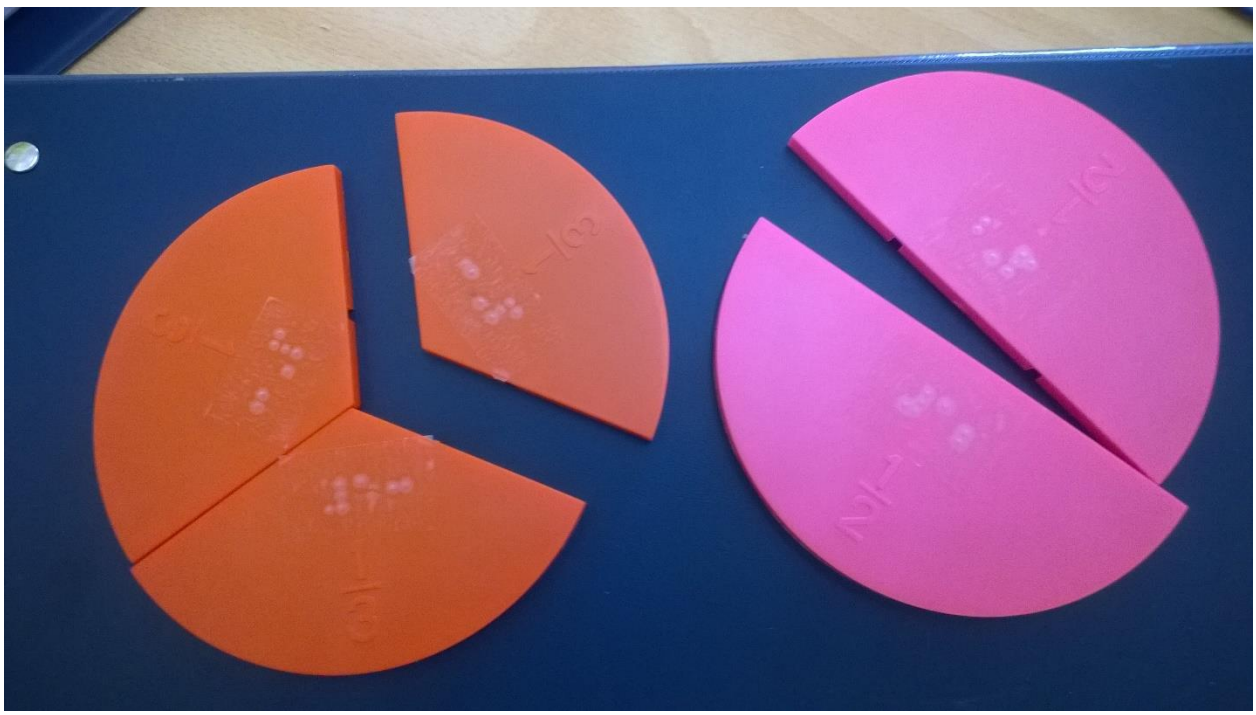

Figure 13: Transparent Braille on plastic

Figures 14 and 15 below shows a globe coated with transparent Braille material to represent the colours and text on the sighted surface.

Figure 14: Globe with transparent Braille

Figure 15:Globe with transparent Braille

Figure 16 below shows a plastic ruler with embossed lines to represent millimetres and centimetres and below it a laminated paper made ruler with both Braille and sighted numbers so that the teacher can use it with the student.

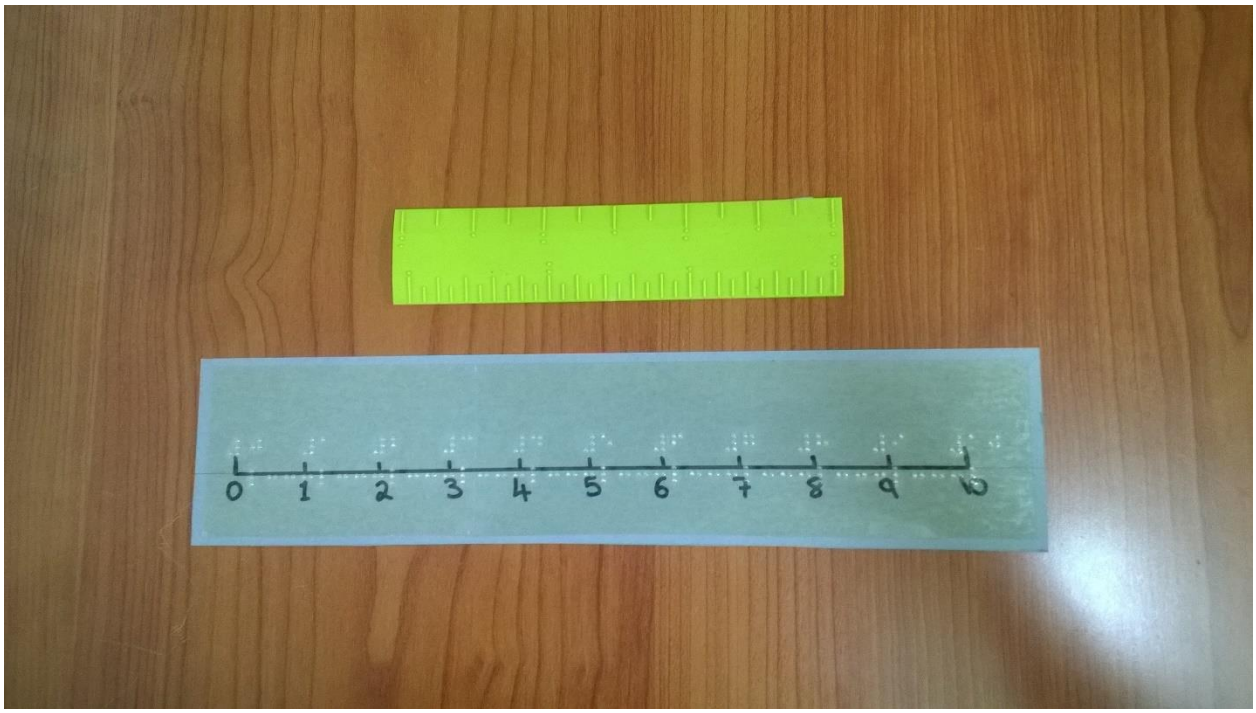

Figure 16: Plastic ruler

Figures 17 and 18 below shows a toy clock for learning time, adjusted for use by the student who is blind, with transparent Braille symbols over the sighted numbers and sticky material to represent and distinguish hour points.

Figure 17: Toy clock with Braille and visual numbers

Figure 18: Toy clock with Braille and visual numbers

School books in accessible electronic format

Examples:

1. Link: Mathematics, 1st Grade, Elementary in PDF format.
2. Link: Mathematics, 1st Grade, Elementary in Word Format (text).

Audio books (mp3 and/or DAISY)

Example:

1. Link: "The Little Prince" (in Greek), in Audio MP3 format.

Support peripatetic teachers and/or class assistants are responsible for the provision of these materials. Sometimes they may prepare some material themselves.

Materials are usually prepared by qualified transcribing services with equipment such as:

- Professional Embossers, Scanners and Transcription Software (for Braille material),
- Minolta machines for capsulated paper and Thermoform (for tactile material and older books),
- Colour laser printers (for large print) material,

- Professional software for DAISY and mp3 production with licenses digital synthetic SAPI 5 voices,
- Access to The RoboBraille service (for converting text into audio books, e-books, DAISY books, accessible PDF, Braille)

These services are usually provided by:

- The Ministry of Education
- The resource centre or the special school supporting the visually impaired student

There is a procedure to be followed in order to keep priority especially for students at the beginning of every academic year if the visually impaired students are to have all the material they need available to them.

However, problems related to the adaptation of accessible material may include:

- There is no standard production of alternate media for visually impaired students; they are produced on demand.
- There are only few library services for the blind and partially sighted, often students have to wait for the books in the requested format to be converted and receive them later on.
- Many teachers are not familiar with accessing and downloading digital material from the internet.
- Not all EU countries have a centralized repository of digital, large print or Braille books.
- Alternate media are funded either by: state/regional/local administration.
- The students may only have access to the material under supervision of teachers.

Preparation for inclusion

Preparation interventions should be available for students with visual impairment when they are about to move from one milestone to another to assist in overcoming the challenges associated with their visual disability.

Early years of life

It is widely acknowledged that when proper intervention is offered early, teachers can aim high for all their students.

An early intervention program for children from 0 to 6 years of age can include:

Ongoing, individualized service to children with visual impairment and those with additional disabilities from the time the visual impairment is recognised. It may also include activities such as training and support to parents and caregivers (who in many cases may include the grandparents and siblings), in order to:

- Enable them to enhance the child's growth.
- Access needed services and resources.
- Be able to make the right decision on an appropriate educational setting.
- Learn Braille, if it is needed to support the child.

Also:

- Train professionals who work with visually impaired learners in mainstream settings (such as nursery schools, pre-schools or therapy centres) to increase their capacity in meeting the needs of the children.
- Work directly with the children and provide vital learning, literacy, and socialization experiences.

Children learn:

- Pre-Braille and Basic Braille skills.
- Orientation and Mobility skills.
- How to use their residual vision
- The use of Snoezelen rooms (Multisensory stimulation – method invented in the Netherlands now used worldwide)

Participation in networks and support groups

Through supportive groups, children, parents and caregivers all benefit in an effective way as these formal and informal groups set an environment in where participants can share ideas, experiences and similar concerns for the development of their children.

Multidisciplinary teams will typically assess a child with visual impairment in order to define an appropriate educational setting in which the child will receive his/her education. The teacher of the visually impaired is also responsible for collaborating with the defined setting and work out all details including environmental audit, means and devices that the child will need for a successful education.

School years

Both children with visual impairment who have been diagnosed from the early years and those who have been diagnosed while attending a mainstream school can benefit by a preparation program that mainly assists in the smooth transition from one educational level to another (i.e. elementary to high school). This program is often lead by the peripatetic teacher of the visually impaired learner in close cooperation with the school and the Ministry of Education.

This preparation program may include:

- Reassessment of the student by all those involved in the education.
- Informing the new school setting with information about the child's visual impairment and its implications.
- Completing an environmental audit of the new school to ensure access to all areas of the school.
- Assessment of required electronic and other technical means that the student will need for his/her education.
- Adaptation and preparation of teaching and other materials for the educational needs of the student with visual impairment (Braille translations, embossed maps and diagrams, 3D printing, enlargements etc.)

In cases where there is no dedicated preparation program for inclusion:

- Inclusion starts from preschool education with special support from resource centres for special educational support.
- Children (or parents) may choose between several types of education in the mainstream school: normal, individual, combined.
- Each form is supported by the recourse centres.
- Resource centres provide children with knowledge in special subjects also (like orientation and mobility; daily living skills; vision (speech) rehabilitation etc.)

Higher education years

To ease the transition to higher education for visually impaired students, a number of services and schemes are available. The level of service and funding are different for the participating countries but good practice may include:

- Each visually impaired student attending higher education is linked to a peripatetic teacher for the visually impaired.
- The peripatetic teacher can assist with the educational material that needs to be transcribed, enlarged or modified.
- Students may also sign up for orientation and mobility courses at the premises of the university campus or computer and daily living skills courses.
- Students may also benefit by applying for a scheme to acquire electronic and other means as well as a monthly travel allowance.

Employment

An employee with visual impairment may have acquired the skills to perform the essential functions of their jobs prior to becoming visually impaired or be a new employee who have been visually impaired all their lives. In either case he/she can benefit by a number of schemes available to ease the transition into employment. The level of service and funding are different for the participating countries but good practice may include:

- Assistance in providing accommodations and/or modifications to the work environment in order to achieve in the work force and be as competitive as possible. More specifically, the Adult training programs can assist in updating or learning new skills including orientation and mobility in the new job setting, computer skills etc.
- Assist in obtaining electronic and other devices - such as accessibility software and magnification devices- in order to carry out the job tasks effectively.
- Offer a monthly travel allowance in order to contribute to the cost that is related to their disability as well as overcome some of the challenges in cases of public transportation system and to access the build environment.

Teaching environments

Being independent in the classroom and school environment is what defines for the student with visual impairment their ability for independence later in life.

It is important to provide a suitable and safe learning environment for children with visual impairment, whilst keeping a balance between creating a completely safe and manageable environment and giving them enough challenges to prepare them for the dangers and obstacles of the outside world.

Preparing/adjusting the environment (classroom and school), the teacher should bear in mind the safety of the student, the accessibility of the classroom and the school's overall environment, the provision of equality of opportunity of the student and the efficient use of all resources available.

For the student with visual impairment, adjusting the school's environment should focus on the following areas (see Chapman and Store, 1988, "The Visually Handicapped Child in your Classroom: Managing the Environment"):

- The visual environment.
- The sound environment.
- The tactile environment.
- The social environment.

Adjusting the visual environment includes lighting, contrast between surfaces and glare. Sound environment refers to good sound conditions especially for the student with no residual vision and also audio material. Tactile environment, concerns all surfaces inside and outside the classroom and making them distinct between them. Finally, the social environment includes support staff but also playtime and other social activities.

Nina Čelešnik Kozamernik, M. A., a teacher at the Institute for blind and partially sighted, in Ljubljana, Slovenia, outlines a number of good practices in her article entitled "*70 different games and activities for early language teaching to blind and partially sighted children*". Use the following link for more information at the ICEVI web site: http://www.icevi-europe.org/topics/lv/ELT-Celesnik.doc.

Classroom Layout and Assistance

Classroom Assistance

In some European countries, the educational legislation provides that in addition to the support "peripatetic" teacher, a classroom assistant is assigned for visually impaired students.

Classroom assistance is provided when:

- The residual visual acuity is below 2/10 (this must be certified by a certified healthcare provider).
- There is a request from the parents.

When this is the case, a multidisciplinary team decides if such an assistance is necessary for the student.

The request is then forwarded to the Local Committee for Special Education to the Ministry of Education and Culture who proceeds with all necessary procedures to request funding for an assistant.

Oftentimes, an assistant serves the needs of more than one student.

Usually assistants are assigned to students with total sight loss, mostly at the elementary school level, and for students that besides the visually impaired have additional disabilities and attend regular education

The qualifications of classroom assistants vary from country to country. In some countries, all is required is a high school certificate while in other countries they must be qualified with a university degree. When employed, he/she is specifically trained by the employer (usually a social enterprise specialized in social/education assistance) to support students with visual impairment.

Classroom assistants are hired by the Local Educational Authority.

This is funded by the state and regional or local administration.

These assistants are assigned to a specific school and are hired to offer assistance to specific students, sometimes more than one.

The assistance takes place during class and during break times. Especially in subjects that require team work, collaboration and movement, such as Physical Education, Design and Technology or Art.

Classroom and School Layout

In an environmental audit information is included regarding:

a. The classroom or the classrooms used by the student with visual impairment
b. Routes in the school the student might use (corridors, stairs etc.)
c. Other areas like playgrounds, fields, gymnasium

Any adaptation should be carried out considering *safety*, *accessibility* and *equal opportunity* for the student with visual impairment.

Things that should be considered:

- Keeping furniture and other objects (tables, chairs, dustbins) in accustomed and accessible places.

- Avoiding leaving loose carpets and/or cords on the floor.
- Avoiding leaving doors and/or windows half open (especially in corridors).
- Using high colour contrast (e.g. dark coloured doors on white walls).
- Using tactile materials to create cues for any changes in the physical environment.
- Putting signs up at student's eye level.
- Using good overall lighting.
- Avoiding glare on surfaces like the black/white board.
- Using appropriate curtains and blinds to keep out excess light.
- Mark the top of steps with a different tactile surface or colour.
- Trying to keep noise level reduced.
- Speaking clearly.
- Addressing the student(s) with visual impairment by name when talking to them.
- Giving clear instructions that both sighted and visually impaired students can follow.

Figures 19, 20 and 21 show how the physical environment is marked. For students with no residual sight that use a white cane in moving around the school, the top step of each stair is marked with tactile material.

Figure 19: Stairs with green plastic grass marking first step

Figure 20: Stairs with green plastic grass marking first step

Figure 21: Close-up of green plastic grass marking first step

Figures 22 and 23 illustrates how rails can be used to mark-up the physical environment. Rails sometimes are helpful for students to move around using the trailing technique and/or for safety (preventing accidents).

Figure 22: Protecting metal railing outside classroom

Figure 23: Protective railing

Figure 24 shows use of good light contrast between doors and walls, signs at students' eye level and if using a Braille label, putting it near the doorknob so students with visual impairment can easily find it.

Figure 24: Use of contrast and signage

These audits are carried out by the peripatetic teacher of the visually impaired along with an orientation and mobility instructor.

The decisions are implemented by the Local Educational Authority of the School by funding that comes from the government and by taxes collected by the Authority.

Funding Models

Area	Italy	Cyprus	Bulgaria
Support Structure	Local Administration/ Government	Government	
Alternate Media Production	Primary Education: Local Administration Secondary & Higher Education: Metropolitan or Provincial Administration/ Government	Government (through the annual provisional budget of St. Barnabas School for the blind)	Government (Ministry of education, Centres for Special Education Support)
Teaching Environment	Local Administration/ City Health Administration/ Private Donations directly to students	Government (through Local Educational Authorities)	State/ Donations

References

1. United Nations Convention on the Rights of Persons with Disabilities
   Find details in this Link: http://www.un.org/disabilities/convention/convention-full.shtml
2. General Comment No. 4 “2016” on article 24 of the Convention. Find the text on this link: http://www.ohchr.org/Documents/HRBodies/CRPD/GC/RighttoEducation/CRPD-C-GC-4.doc
3. Rita Kirkwood, 1994, The University of Birmingham, School of Education, EDSE 24: Assessment and Teaching, Unit 8: Management of the Environment
4. Chapman and Store, 1988, “The Visually Handicapped Child in your Classroom: Managing the Environment”.
5. “70 different games and activities for early language teaching to blind and partially sighted children” Nina Čelešnik Kozamernik, M. A (WWW.ICEVI-EUROPE.ORG/TOPICS/LV/ELT-CELESNIK.DOC)

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