



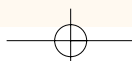
INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

GENERAL OUTLINE OF THE PROJECT

“GENERAL AND SPECIALISED TRAINING OF TEACHERS IN ISSUES OF BLIND AND PARTIALLY SIGHTED CHILDREN”

Aspects of the project	The project includes two central aspects:
ASPECT I Training course	The first aspect involves an intensive training course of teachers in both general and special education working in primary and secondary schools (i.e. educators that will eventually work at the special education sector and inclusive classes) in educating blind and partially sighted students.
Structure of the course	80 teachers participate in this course, which consists of a 100-hour theoretical cycle and a 300-hour practical training cycle (total: 400 hours).
Theoretical cycle	<i>The theoretical cycle's themes concern:</i> a) special and inclusive education for children with serious visual impairment, b) special educational practices regarding curriculum, c) a sociological, pedagogical and psychological approach to individuals with visual impairment, and d) the Braille system as a form of written communication.
The practical training cycle	<i>The practical training cycle aims at:</i> a) familiarising teachers with blind and partially sighted students, b) learning special skills required in educating blind and partially sighted children (reading and writing in Braille, orientation and mobility, tactile educational material), c) learning basic techniques required in planning and differentiating the curriculum in primary and secondary school subjects, and d) implementation of special skills in educational practice.
Team of instructors	The specialised educators responsible for the training are expert members of the research and educational community regarding the education of visually impaired students.
ASPECT II Disseminating knowledge	The second aspect aims at disseminating knowledge to teachers in both general and special education working in primary and secondary schools (i.e. educators that may eventually work at the special education sector and inclusive classes) in educating blind and visually impaired students, a process, which is realised through this International Conference.
Thematic areas	<i>The conference focuses on:</i> a) the European dimension of education for individuals with visual impairment, b) the current directions in inclusive education, and c) research conducted by the scientific community.
Speakers	The speakers come both from Greece and abroad and are involved in special and inclusive education of blind and partially sighted children. Representatives of disabled people organisations participate as well, in order to testify to their experience and their views on the issue of educational inclusion of blind children.
Production of educational material	<i>These two aspects (training course and conference) will eventually result in:</i> <ul style="list-style-type: none"> • Educational material for blind and visually impaired children. • Research data required by researchers and teachers alike. • Audiovisual educational material, that will form a useful scientific and evaluation tool for further training projects in the future.





INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

FRIDAY 6TH OF FEBRUARY 2004

Opening

- 17.00-18.00** Registration
- 18.00-18.30** Opening. Address from Tzela Varnava-Skoura, Professor and Head of the Department of Early Childhood Education, University of Athens, Greece
Addressing by institutional representatives

OPENING SESSION: Inclusive Education

- Chair** Tzela Varnava-Skoura (Professor and Head of the Department of Early Childhood Education, University of Athens, Greece)
- 18.30-19.10** *Educational inclusion in Greece: a twenty-year process*
Athina Zoniou-Sideri (Associate Professor, Department of Early Childhood Education, University of Athens, Greece, and scientific director of the project)
- 19.10-19.50** *Inclusive Education and Education Reform in New Times*
Roger Slee (Professor, Dean of the Faculty of Education, McGill University in Montreal, Canada)
- 19.50-20.30** *Inclusion, Participation and Democracy*
Derrick Armstrong (Professor, School of Education, University of Sheffield, United Kingdom)
- 20.30-21.00** Discussion
- 21.00** Cocktail

SATURDAY 7TH OF FEBRUARY 2004

FIRST SESSION: Educational Policy for Blind Students

- Chair** Dimitra Makrinioti (Associate Professor, Department of Early Childhood Education, University of Athens, Greece)
- 09.00-09.40** *Policy aspirations and practical realities: educational provision for children with visual impairment in England*
Elizabeth Clery, Cert.Ed., Dip. Sp.Ed. (VI) (Children's Services Co-ordinator, Royal National Institute of the Blind, United Kingdom)
- 09.40-10.20** *Policy-making for early educational and social support of pupils with visual impairment*
Anastasia Vlachou (Assistant Professor, Department of Special Education, University of Thessaly, Greece)
- 10.20-11.00** *Educational policy for the education of blind children*
Karin Edigkauer, MA (Special teacher and orientation and mobility instructor, State School for the Visually Impaired, Schleswig, Germany)
- 11.00-11.15** Discussion
- 11.15-11.45** Coffee Break



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

SECOND SESSION: Research on Blindness

- Chair** Nellie Askouni (Lecturer, Department of Early Childhood Education, University of Athens, Greece)
- 11.45-12.25** *The blind draw surface edges from their own tactual vantage point*
John M. Kennedy (Chair, Department of Life Sciences, University of Toronto at Scarborough, Canada)
- 12.25-13.05** *Reading and spatial cognition through touch and movement*
Susanna Millar, PhD (Department of Experimental Psychology, University of Oxford, United Kingdom)
- 13.05-13.45** *The use of Metaphor in interaction between teachers and blind students*
Panagiota Karagianni, PhD (Centre for Research and Practice in Inclusive Educational Programmes, Department of Early Childhood Education, University of Athens, Greece)
- 13.45-14.00** Discussion
- 14.00-15.30** Lunch

THIRD SESSION: The Role of the National Centres for the Blind

- Chair** Eugenia Koutsouvanou (Professor, Department of Early Childhood Education, University of Athens, Greece)
- 15.30-16.10** *Centre for the Education and Rehabilitation of the Blind (K.E.A.T.): Past, Present, Future*
Argyro Raptou (Scientific Director, Centre for the Education and Rehabilitation of the Blind, Athens, Greece)
- 16.10-16.50** *By accident or design: the role of the Royal National Institute of the Blind (R.N.I.B.) in meeting the educational needs of children with visual impairment in the United Kingdom*
Eamonn Fetton, B.Ed, MA (Director of Education and Employment, Royal National Institute of the Blind, United Kingdom)
- 16.50-17.30** *The involvement of the Movement for the Well-being of the Blind in the implementation of educational policy for the blind in Cyprus*
Christakis Nikolaidis (General Secretary of the Cypriot Organisation of the Blind, Cyprus)
- 17.30-18.10** *The role of a Resource Centre*
Øystein Forsbak (Director of Tambartun National Resource Centre, Trondheim, Norway)
- 18.10-18.30** Discussion
- 18.30-19.00** Coffee Break



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

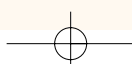
FORTH SESSION: Issues of Blindness and Space

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|--------------------|---|
| Chair | Maria Malikiosi-Loisou (Professor, Department of Early Childhood Education, University of Athens, Greece) |
| 19.00-19.40 | <i>Orientation and Mobility: An essential component of Inclusive Education for students with visual impairment</i>
Diane L. Fazzi , PhD (Professor and Coordinator, Orientation and Mobility Specialist Training Program, California State University, Los Angeles, United States of America) |
| 19.40-20.20 | <i>Designing buildings and urban areas for all, with extra concern for people with special needs</i>
Sofia Papisotiriou (Assistant Professor, Architectural Design and Plastic Art Sector, Department of Architecture, Aristotelian University of Thessalonica, Greece) |
| 20.20-20.40 | Discussion |
| 20.40-21.15 | Reporting the day's proceedings |

SUNDAY 8TH OF FEBRUARY 2004

FIRST SESSION: Curriculum and Differentiation

- | | |
|--------------------|--|
| Chair | Kostas Chrisafidis (Associate Professor, Department of Early Childhood Education, University of Athens, Greece) |
| 09.00-09.40 | <i>Teaching Literacy through Braille in Inclusive Settings</i>
João Roe , PhD (Joint Team Leader, Bristol Sensory Support Service, Vision Team Support, United Kingdom) |
| 09.40-10.20 | <i>The importance and the role of Curriculum in the inclusive education of blind children in Greece</i>
Athina Zoniou-Sideri, Panagiota Karagianni, Eudoxia Deropoulou-Derou, Georgia Papastaurinidou, Ilektra Spandagou (Members of the research team on Curriculum, Centre for Research and Practice in Inclusive Educational Programmes, Department of Early Childhood Education, University of Athens, Greece) |
| 10.20-11.00 | <i>The Mathematics Curriculum and how to implement it amongst pupils with visual impairment in mainstream education</i>
Emmy Csocsán (Professor, Rehabilitation Sciences Faculty, Dortmund University, Germany) |
| 11.00-11.30 | Discussion |
| 11.30-12.00 | Coffee Break |



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

SECOND SESSION: Technological Advances

Chair Vasilis Tselfes (Associate Professor, Department of Early Childhood Education, University of Athens, Greece)

12.00-12.40 *Information Technology and inclusive education of blind students*

George Th. Kouroupetroglou (Professor, Department of Information and Telecommunications, University of Athens, Greece)

12.40 -13.20 *Assistive Technology for the preparation of scientific documents for blind users*

Mag. **Mario Batusic** (Member of the scientific/project team of the Institute "Integrated Studying", Johannes Kepler University, Linz, Austria)

13.20-14.00 *Libraries accessible by all*

Moses Courouzidis (Seismologist, Director of the Evonymos Library of Ecology, Athens, Greece)

14.00-14.30 Discussion

14.30-16.00 Lunch

THIRD SESSION: From Educational to Social Inclusion

Chair Kallirroï Papadopoulou (Lecturer, Department of Early Childhood Education, University of Athens, Greece)

16.00-16.40 *Social and professional inclusion of the Blind in Greece*

Ilias Margiolas (President of the Panhellenic Association of the Blind, Greece)

16.40-17.20 A blind person's experience as a student and as a teacher

Nektarios Paisios (Student, Department of Education, University of Cyprus, Cyprus)

17.20-18.00 *Educational inclusion of the blind in Greece. An inclusive programme at the 35th Primary School in Piraeus*

Alexis Glinos (Special teacher for the Blind, Greece)

18.00-18.30 Discussion

18.30-19.00 Coffee Break

CLOSING SESSION

Chair Athina Zoniou-Sideri (Associate Professor in the Department of Early Childhood Education, University of Athens, Greece, and scientific director of the project)

19.00-20.00 Reporting the proceeding of the Conference
Evaluation of the Conference

Closing of the Conference



ABSTRACTS

**Athina
Zoniou-Sideri**

EDUCATIONAL INCLUSION IN GREECE: A TWENTY-YEAR PROCESS

This paper introduces a critical review of the question of inclusion in Greece. The question of educational inclusion of disabled children, as defined, at least at a theoretical level, in Greece, has been more than a simple educational practice, with clear ideological, philosophical, social and political dimensions. Important changes in mainstream and special education have become milestones in the inclusion process. In special education, specifically, the introduction of new terms (some of which have been used in an attempt to broaden or even replace the term "inclusion"), new categories of special needs and new ways of diagnosis, intervention and education give the impression that the role of inclusion is now a very different one.

However, inclusion as an educational and social goal is characterised both by change and stability, given its dual purpose: a) to bring immediate change to the existing educational system in order to facilitate the inclusion of disabled students; b) to change the very structure of the system in order to make it an inclusive one. Through this process, inclusion aims at the promotion of a democratic school for all.

This address also attempts a multiple approach to the question of inclusion. First, a historical review of the inclusion process is presented, in order to highlight both turning points and continuity in educational policy and practice. This is followed by a theoretical discussion of the term "inclusion" and, more importantly, of its ideological significance as a means of change in the educational system.

**Roger
Slee**

INCLUSIVE EDUCATION AND EDUCATION REFORM IN NEW TIMES

This address reports on the progress of inclusive education policy and practice in the Australian state of Queensland. An attempt is made to differentiate inclusive education from traditional approaches to special educational needs, which ultimately reinforce spoiled student identities and reinforce educational exclusion. Inclusive education encourages us to look at school organisation, curriculum, pedagogy and educational policy and protocols to identify forms of exclusion with a view to dismantling barriers that prevent access and success for a range of different students. The paper draws from a range of research to argue for schools reform as the key to educational inclusion rather than for integrating students into the educational status quo.

**Derrick
Armstrong**

INCLUSION, PARTICIPATION AND DEMOCRACY

Raymond Williams maintained that "The struggle for democracy is a struggle for the recognition of equality of being, or it is nothing". In this paper I will consider the arguments for inclusive education and review the progress that has been made towards implementing an inclusive agenda in the European context. I will argue that inclusion has been widely constructed within a hegemonic framework that undermines its fundamental value in promoting participation and democracy. An alternative model will be put forward that recognises the highly contested nature of power and knowledge within education systems. This model emphasises the role of an inclusive philosophy in supporting democratic participation that is meaningful in terms of the relationship between difference and the understanding of power as a creative energy.

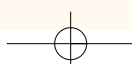
**Elizabeth
Clery**

POLICY ASPIRATIONS AND PRACTICAL REALITIES: EDUCATIONAL PROVISION FOR CHILDREN WITH VISUAL IMPAIRMENT IN ENGLAND

The publication of the Warnock Report in 1978 leading to the 1981 Education Act was a turning point in the education of children with special educational needs. Since then, there has been a major emphasis on including the majority of children with special educational needs in mainstream schools; consequently, special schools are increasingly meeting the needs of children who have significant additional disabilities. This presentation will focus on three inter-related aspects of policy and practice which have shaped the outcomes for children with visual impairment.

The presentation will begin with an outline of the legislative framework for children with special educational needs, identifying the key aspects that have had an impact on the development of provision for children with visual impairment. Reference will be made to R.N.I.B.'s own research, which looks at numbers of children, types of need and educational placement. The next section will describe the framework that is in place to meet the needs of children with visual impairment. The presentation will then identify some of the tensions, barriers and solutions that have emerged through the process, using real examples to illustrate key points. In this section reference will be made to a recent report that looks at how well the system of education is serving children with special educational needs.

It is hoped that this presentation will highlight the key issues to be addressed in terms of policy and



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

**Anastasia
Vlachou**

practice and will be of use to the range of professionals involved in developing and delivering quality services to blind and partially sighted children in Greece.

POLICY-MAKING FOR EARLY EDUCATIONAL AND SOCIAL SUPPORT OF PUPILS WITH VISUAL IMPAIRMENT

The policy for early educational and social support of students with visual impairment is part of any country's wider educational policy and aims at the creation of structures that will serve early intervention and support. The existence of structures and services for early educational and social support is an issue of major importance both in diminishing the factors that jeopardise a child's normal growth and in the improvement of the quality of educational services rendered to students with special educational needs, including students with visual impairment.

This paper attempts: 1) to outline the current Greek reality concerning early educational support for individuals with special educational needs, 2) a critical approach to international practice in developing different policies-practices for early educational intervention, and 3) to develop a framework for the support of students with special educational needs in general and, more specifically, of students with visual impairment in the course of their transition from pre-school education to primary school.

**Karin
Edigkauer**

EDUCATIONAL POLICY FOR THE EDUCATION OF BLIND CHILDREN

After explaining briefly the structure of the German education policy at large a closer look will be taken at the Land of Schleswig-Holstein, which has been one of the first Lands in Germany for inclusive education for the visually impaired (that is those who are blind or have low vision).

The presentation will explain the newly developed curriculum differentiations in order to meet the needs of all children and youth with special educational needs, regardless which school they are attending.

Followed by an introduction to the School for the Visually Impaired in Schleswig-Holstein (an institution that ever since its foundation 20 years ago has played a major role within the national institutes for the blind) and its inclusive educational practice, a brief overview on the universities in Germany will conclude the presentation.

**John
M. Kennedy**

THE BLIND DRAW SURFACE EDGES FROM THEIR OWN TACTUAL VANTAGE POINT

Drawings by the blind are recognizable by the sighted. Just like drawings by the sighted, they show surfaces. The surfaces are the fronts or sides of objects. The surfaces show where the observer is: the visual or tactual vantage point. Just as the sighted have a vantage point, the blind have a tactual one. The drawings use lines to show the edges of surfaces.

Surfaces can overlap, and drawings by the blind use Ts to show the overlapping surface is in front. Surfaces of objects contact the ground, and the blind often use increasing height in the picture to show which object is further away.

A good theory of what the blind and the sighted can both do in pictures will help educators preserve the idea that the blind understand pictures (Eriksson, 1998).

**Susanna
Millar**

READING AND SPATIAL COGNITION THROUGH TOUCH AND MOVEMENT

Two areas of research are of particular importance for the education of blind children: Reading by touch, and spatial perception and cognition. This talk focuses on findings on braille and on understanding spatial relations in personal and geographic space through touch and movement.

Advances in cognitive neuroscience have shown that accurate perception and performance depends on multisensory information. The fact that active touch itself is not a single sense, nor a tightly organised single modality, but depends on the convergence of information from different sensory sources is, therefore, particularly important for development and learning in the absence of vision. Active touch, or haptic perception, depends crucially on information from scanning movements, as well as on inputs from touch, and also requires the use of reference cues for spatial coding. The convergence of information from all these sources plays a substantial part in relation to verbal and language skills in the development of fluent braille reading. Body-centred cues from head, neck and limb and body postures provide reference cues for locations, distances and directions that are particularly important for mapping tabletop and personal space. Evidence that such egocentric spatial reference can also be correlated with environmental reference cues in blind conditions will be discussed in relation to map-reading and mobility in geographic space.

Complete blindness from birth is relatively rare. This talk will conclude with a brief consideration of what is known so far about the flexibility of the human brain in adapting to different aspects of lack of vision.



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

**Panagiota
Karagianni**

THE USE OF METAPHOR IN INTERACTION BETWEEN TEACHERS AND BLIND STUDENTS

Metaphor, as a means of verbal expression, has a long history in linguistics, philosophy and psychology. Metaphor is a key element in the efficient communication of complex ideas and as a basic component of the thought structure itself. Therefore, the study of metaphor within the educational framework is important.

In this paper, metaphor is explored in the educational community of the blind, i.e. the ways through which language is used to create common knowledge and understanding. Metaphors found in textbooks, the way that blind children produce metaphors and the frequency with which metaphors are produced and used by teachers in the classroom are studied. The difficulties that blind students face in metaphor understanding and production, and the existing model for teaching metaphor in the classroom are presented.

Ethnographic data was collected, and classroom conversations were tape-recorded and analysed using Grounded Theory.

Conclusions suggest that blind children make use of their semantic knowledge while trying to understand metaphoric speech. This forces teachers to use almost exclusively commonplace explanations that significantly narrow the opportunities that metaphors could offer for knowledge. Sight-based explanations are simply replaced by other sight-based explanations. The opportunities that metaphors offer for a deeper understanding and knowledge, are missed. Concluding, through research of metaphor, several issues concerning special education, with emphasis on the education of blind children, have arisen.

**Argyro
Raptou**

CENTRE FOR THE EDUCATION AND REHABILITATION OF THE BLIND (K.E.A.T.): PAST, PRESENT, FUTURE

Since its founding in 1906, K.E.A.T.'s history is interwoven with modern Greek history. Demetrios Vikelas' and George Drosini's then-pioneering initiative marked the beginning of education and rehabilitation for people with visual impairment in Greece. Throughout its long history, the Centre has been fighting for the social inclusion of blind people. Several benefactors, intellectuals and the Greek Church, which managed the Centre until 1979, have contributed to that cause.

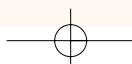
Today, the K.E.A.T. is a public foundation supervised by the Ministry of Health. It is an active organisation which offers services to people with visual impairment at every educational level. Among those services, we mention the following: A pre-school centre, the hosting of a special kindergarten and a special primary school, extra tutoring for pupils aged 12-18, a printing facility. At the same time, with the initiative and support of K.E.A.T. and in cooperation with other organisations the "Teiresias Institute" for professional education and the Unit for Education of Blind-deaf Children have been established. K.E.A.T.'s new facilities, its specially trained staff and its educational materials every year provide numerous academics and other professionals the chance to gain knowledge and experience on issues concerning people with a visual disability.

In the future, K.E.A.T. aspires, with the help of the Greek state, to improve conditions for the education and inclusion of blind people into society. K.E.A.T.'s present and future plans include even more collaboration with individuals and foundations in Greece and abroad, development of and training in new technologies, research, on-going in-service training for its staff and the development of more professional opportunities for people with visual impairment.

**Eamonn
Fetton**

BY ACCIDENT OR DESIGN: THE ROLE OF THE ROYAL NATIONAL INSTITUTE OF THE BLIND (R.N.I.B.) IN MEETING THE EDUCATIONAL NEEDS OF CHILDREN WITH VISUAL IMPAIRMENT IN THE UNITED KINGDOM

The objective of this paper is not simply to provide a narrative description of the services provided by R.N.I.B., but to use the R.N.I.B. experience as a basis for considering which aspects of provision may be best planned on a national, regional or local basis. As the title of this paper implies, the nature of provision will be influenced by a whole range of factors and will therefore begin by looking at some of the historical, political and cultural factors which have provided the context for the development of R.N.I.B.'s provision in the U.K. Having set the scene, the paper summarises R.N.I.B.'s provision in relation to three broad strategic approaches: influencing policy and practice, through research, pro-active policy and campaigning; enabling and enhancing statutory provision, through the provision of information, training and consultancy and the provision of highly specialised services which may not otherwise be available, including special schools for multi-disabled children and the production of curriculum resources. R.N.I.B. services reflect the U.K. context and R.N.I.B.'s charitable status but could this experience help to inform the planning of provision in other countries? In response to this question, the paper considers the case for planning aspects of provision at different levels: national, regional and





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Education and Blindness: Current Trends and Perspectives

Christakis
Nikolaïdis

local. Finally, it highlights some of interesting philosophical issues surrounding the potential roles of the statutory, commercial and voluntary sectors.

THE INVOLVEMENT OF THE MOVEMENT FOR THE WELL-BEING OF THE BLIND IN THE IMPLEMENTATION OF EDUCATIONAL POLICY FOR THE BLIND IN CYPRUS

The Cypriot State, in collaboration with organisations of disabled people, succeeded in instituting, in 1999, a special educational model in Cyprus and in specifying processes for the common education of children with visual or other disabilities. This act is one of the most modern legislative frameworks regarding educational inclusion of disabled children in mainstream education.

According to this act, all disabled children attend mainstream schools, while the state is responsible for hiring the specialist or other personnel required and for providing the children with all the materials necessary for covering their special educational needs. The act practically eliminates the major obstacles toward educational inclusion and attendance in mainstream schools and universities.

Successful implementation of this educational system, however, depends on many diverse factors, which could result in its collapse without the active intervention of the Movement for the Well-being of the Blind and its constituent organisations in the promotion of inclusive education.

The legal framework, however, is itself so complex that it requires constant effort and well orchestrated actions by the above organisations, so that the law, in fact, becomes reality, securing a fair place for all blind children at every level of education. Although the Movement's intervention is not always welcomed by Cyprus' educational establishment, it does help –often decisively– to solve problems, to institute new policies and to bridge “gaps” in existing law.

These interventions refer both to the implementation of teaching methods and the use of special means and techniques, as well as to preparing the children to face any obstacles on their way to social and professional inclusion.

The Movement for the Well-being of the Blind is not interested exclusively in theoretical discussion regarding the educational inclusion of the blind; it is also involved in every process which aims to eliminate stigmatisation and marginalization of blind children. The Movement also makes sure that the individual educational and pedagogical needs of each blind child are recognised and recorded. Furthermore, it collaborates with the state in the decisions about the place and the form of education provided, taking into consideration the abovementioned individual needs, the fulfilment of which depends on prevailing circumstances. This is the only way to make sure that the education of the blind, in either a special or a mainstream school, supported by specially trained educators, will be legally guaranteed, at least in theory.

Øystein
Forsbak

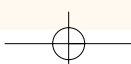
THE ROLE OF A RESOURCE CENTRE

In 1991, a reorganisation of special education was adopted by the Norwegian Parliament, by which the two schools for visually impaired in Norway together with the special schools for hearing impaired, language disorders, behavioural disorders, and learning disabilities became resource centres for special education. Today the Norwegian support system for Special Needs Education consists of 31 resource centres.

The overall aim for the support system is to ensure equivalent, locally based training provisions for all users on their own terms by means of a high level of competence in special education within a national network. The primary goal for the support system is to give guidance and support to the local educational authorities in providing educational facilities for children, young people and adults with special educational needs.

Tambartun national resource centre is one of two centres for the visually impaired in the Norwegian support system. Services from Tambartun are based on the principle of inclusion, and the main activities of the centre are:

- **Assessment** of vision, educational assessment and developmental screening and assessment.
- **Local consulting and tutoring** by family focused early intervention, pre-school advisory services and client-oriented multi-disciplinary counselling and guidance in ordinary schools.
- **Pedagogical training courses** (for teachers, classroom assistants, advisory teachers, other staff members from local schools, and for parents). The last years we have, in cooperation with the university of Trondheim, started the implementation of IT in teacher training courses.
- **Production and distribution** of learning materials and specialised literature.
- **Develop competence** by research and development work in special needs education.
- **Arrange special education needs courses** for visually impaired pupils.





INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

The ideology of the centre is briefly described by the terms:

- A competence-building service profile.
- Holistic and long term planning by developing individual plan for each pupil.
- Secure the quality of services and products from the centre by team- and project-work.

**Diane
L. Fazzi**

ORIENTATION AND MOBILITY: AN ESSENTIAL COMPONENT OF INCLUSIVE EDUCATION FOR STUDENTS WITH VISUAL IMPAIRMENT

This presentation will provide participants with an overview of O&M services for children and youth with visual impairments, from early childhood through high school and transition to adult living. The need for comprehensive O&M services as part of an inclusive education program will be stressed. While many of the essential components of teaching O&M remain the same for specialized and inclusive environments, there are distinct differences in providing these services in inclusive educational settings and home neighborhoods. Tips for professional and family collaboration, creative scheduling, and instructional delivery model design will be provided. Quality O&M services are dependent upon the availability of well-trained professionals and issues in personnel preparation and caseload management.

**Sofia
Papasotiriou**

DESIGNING BUILDINGS AND URBAN AREAS FOR ALL, WITH EXTRA CONCERN FOR PEOPLE WITH SPECIAL NEEDS

Architecture and urban design is more than a set of rules and regulations. Architecture is closely connected to society, both as a source and as a result of social relations. The study of disability is also an issue transcending technical measures facilitating accessibility.

This essay begins with the history of ideas (Diderot, *La lettre sur les aveugles*) and ends with today's most radical approaches (*Disability Studies, Sociology of the Body*) touching on subjects of terminology, theory, actual implementation (mainly law-making) etc.

In spite of all the above, the title-issue is a relatively new one. It was first broached in the early '60s by certain researchers (primarily by S. Goldsmith, and others, less well-known) within the positive climate of that decade's cultural and social revolutions. Thus, the "liberation" of disadvantaged or marginal social groups and individuals, the struggle for social rights, even the acknowledgement of social identity, has lead to intellectual awareness as well as specific legal, political and scientific choices and actions. Amongst them was the sensitising of architects and their commitment to codes and regulations. Today, in countries where that phase had been an especially intense one, staying informed and responding to that subject is considered an important criterion for an architect's professional competency. The publication of the first code of regulations, the ANSI 117.1 "Moving buildings and facilities accessible to and usable by the physically handicapped", eleven page long, was based on experimental research made by the Nugent University of Illinois. S. Goldsmith's handbook *Designing for the Handicapped* has also greatly influenced the architectural community.

As the issue evolved, but mainly due to pressure exerted by disabled people themselves, there has been a radical change in theory and in architectural approaches, as well as in specific implementation of them (albeit mostly in regulations). The most important milestone was turning from "designing for people with special needs", to "universal design", in other words, abandoning a hegemonic approach to design in favour of a design protocol without reference to such distinctions and which supports full social inclusion and accessibility.

Regarding the general issues of disability, reference is frequently made to *The Sociology of Disability* as well as to important legal acts such as the 1990 "Americans with Disability Act" and the English "Disability Discrimination Act" of 1995. Regarding issues of space regulations, the text used is the *European Manual of Accessibility* (still under elaboration) by the Dutch group of R. van Hek. Regarding the issue of blindness, the texts *Manifesto for a United Nations Convention on the Rights of People with Disabilities* by the World Blind Union and parts 2 and 3 of the ADA are used. In the examples section, the method of orientation for blind people used in Prague is extensively analysed.

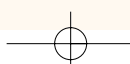
**João
Roe**

TEACHING LITERACY THROUGH BRAILLE IN INCLUSIVE SETTINGS

The aim of this session is to explore issues related to teaching children literacy through touch whilst including them in a setting where most children are learning literacy through print.

Teaching literacy through Braille is in some ways similar and in some other ways very different from teaching literacy through print. This brings a dilemma for teachers working with children using Braille. Effective planning is needed to ensure that children are included in class activities whilst having opportunities to develop the specific skills needed to learn Braille.

Part of this session focuses on the initial stages of developing literacy skills when children are still not



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

able to follow text independently. This is when the challenges to include these children in mainstream schools and the differences between print and Braille are very obvious.

The session also covers possible obstacles to inclusion during literacy activities and how professionals can work together to promote inclusion whilst ensuring quality teaching of Braille.

Examples of materials and resources developed by the Bristol Team will be shared with the audience. This includes a variety of tactile books and tactile overlays to use with computers.

THE IMPORTANCE AND THE ROLE OF CURRICULUM IN INCLUSIVE EDUCATION FOR BLIND CHILDREN IN GREECE

Many interesting conclusions about the role of school curriculum in inclusive education have been drawn from a research project, in which 650 teachers of all educational levels participated, regarding the attitudes and views of teachers on the issue of inclusive education of disabled students.

Research data analysis has shown that it is not the school curriculum which poses an obstacle to inclusive education so much as the kind and degree of disability of each student. This conclusion leads to a number of further questions concerning the importance of curriculum:

- a) What are the reasons that dictate teachers' medical approach to the issue of inclusive education of disabled children?
- b) Why is the curriculum's role in inclusive education either over or under-estimated?
- c) How can we design and implement an inclusive curriculum for blind children?
- d) Why is differentiation of the curriculum so imperative. Based on what criteria should this be achieved?

This paper, through an historical review of curricula (with emphasis on special education from 1975 onwards), combined with the research results, will try to identify the role of curriculum on the inclusive education of blind children in Greece.

THE MATHEMATICS CURRICULUM AND HOW TO IMPLEMENT IT AMONGST PUPILS WITH VISUAL IMPAIRMENT IN MAINSTREAM EDUCATION

Most of the countries in Europe follow the Salamanca Declaration and their education laws ensure the free choice of school for children and young people with impairment and chronic diseases and their families. Mainstreaming, inclusion has become daily practice in the last twenty years. Children with the same cognitive learning conditions have the same curriculum in schools.

Children with visual impairment explore the world around them in a different way than sighted peers do. Also the ways of developing mental representations and concepts are different. It seems to be a contradiction that sighted and blind students learn the same curriculum. Is it possible to eliminate that contradiction? How is it possible to follow the same content of topics and achieve the same level in the same subject for the blind pupils and students as the sighted ones?

Learning mathematics is important for developing cognitive abilities. These are tools for learning in school and in any field of life. Developing mathematical competence is like building a house. It needs a solid foundation and bricks have to be put on each other in a given order.

Blind pupils often have difficulties in learning mathematics. Many difficulties are the same as the sighted peers have, but some of them are different. One of the difficulties is that they learn facts by heart without links to sensory experiences and without transferring these to reality. The reasons for the difficulties are very often the lack of knowledge on the part of teachers as to how blind children organise sensory inputs and mental representation and problems in the communication between learner and teacher in various situations.

The mathematics curriculum at any given time reflects the development of mathematics as a science itself and also the knowledge of educational sciences.

There are many topics of mathematics which are appropriate to develop cognitive competences for sighted and blind pupils in the same way. But there are some which are not. One possible way to avoid the difficulties in mathematics for blind students is to create a flexible curriculum with alternative content units. To realise good learning conditions for pupils with different needs in school the traditional structure of teaching has to change. More learner-orientated methods are required.

Good co-operation between itinerant teachers and teachers in regular schools is a basic criterion for effective learning by pupils with special needs.

There is not enough research in the field of effectiveness of teaching methods and didactical solutions in mainstream education with pupils with visual impairment, so there is a need for international co-operation in relation to this field.

Athina
Zoniou-Sideri,
Panagiota
Karagianni,
Eudoxia
Deropoulou-
Derou,
Georgia
Papastaurinidou,
Ilektra
Spandagou

Emmy
Csocsán



INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

**George Th.
Kouroupetroglou**

INFORMATION TECHNOLOGY AND INCLUSIVE EDUCATION OF BLIND STUDENTS

In the course of the inclusion process, pupils with reduced sight or complete lack thereof face problems accessing printed learning material, auxiliary learning material (encyclopaedias, magazines, newspapers etc.), the classroom blackboard, projected viewing material, computers and, through them, any electronic learning material (electronic libraries and the world wide web), as well as, finally, educational software. They also have problems with taking notes in class, writing papers at home, and taking part in written tests.

Information and Communication Technology (ICT) is rapidly becoming an important inter-disciplinary tool for accessing knowledge - for all students. In the case of students with visual impairment, ICT already is an important tool for inclusive education. Today, ICT can offer total or partial solution to all of the above-mentioned problems and provide substantial help to pupils with visual impairment.

This address will present a systematic approach to the issue of inclusion of pupils with visual impairment, based on ICT and taking into consideration: 1) the students' needs, 2) available ICT, with emphasis on advanced voice technologies developed in our laboratory, 3) our proposal for the efficient production of accessible educational material, and 4) the need for an accessible (in different formats) code of mathematical and other scientific symbols. Concerning this latter issue, we propose that Greece officially adopts the Nemeth system, as the most clear and comprehensive of existing systems, covering all levels of education and allowing for the transcription of educational material.

**Mario
Batusic**

ASSISTIVE TECHNOLOGY FOR THE PREPARATION OF SCIENTIFIC DOCUMENTS FOR BLIND USERS

The breakneck speed of social and technical development in the last decades of the 20th century and up to now has brought fundamental changes also in the field of the education of blind and visually impaired persons. Social concepts such as "independent living", "inclusion", "equal rights for all" etc. are active in the social consciousness and practice. The time of exclusion and isolation of the disabled in the western world looks like to be past. As part of it a fully new educational system for the blind and visually impaired pupils cries for a full application of modern computer technology.

While some 30 years ago the only educational form for the blind were centralised, specialised schools and the only document medium the braille script on paper, the preparation of educational materials was still manageable by using high level human preparators. The following factors make the use of the modern Assistive Technology mandatory:

- Decentralised education – integration or inclusion of blind and visually impaired pupils in the mainstream education.
- Increasing number of blind/VI students at an increasing number of different high schools and universities.
- Use of computers for interaction, learning and communication in mainstream schools.

This paper outlines the state of the art in the modern Assistive Technology. It deals with the greatest stress with following areas:

- Screen reader hardware and software.
- Braille on paper and/or electronic documents.
- Scientific storage formats.
- Printing systems and translators.

The paper describes some concrete solutions for the preparation of scientific documents and brings a vision of a future learning environment, which is the goal of several ongoing projects in the world.

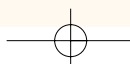
**Moses
Courouzidis**

LIBRARIES ACCESSIBLE BY ALL

Since December 2000, a graduate of the Panteion University of Political and Social Sciences with visual impairment has been hired through the Greek Manpower Employment Organisation (O.A.E.D.) and is working at the Evonymos Library of Ecology as a librarian (indexing magazine articles).

The equipment used in this task are: a low potential computer, a scanner and the Jaws 3.5 speech programme which, in combination with the ABBYY FineReader 6.0 Professional OCR programme and the Apollo 2 voice synthesizer, offer people with visual impairment the opportunity to access libraries and archives. Thus, they can search for and read any kind of printed material from the Evonymos archive. It is also possible to print several pages in Braille (Index and Everest printers).

This equipment, both hardware and software, are of a relatively low cost (except for the printer) and can be purchased by virtually any library, private or public. But in spite of that, libraries that offer blind users this service are few in number.





INTERNATIONAL CONFERENCE

Education and Blindness: Current Trends and Perspectives

**Ilias
Margiolas**

At the Evonymos archive the system is managed by a person with visual impairment. Up to now, this person has indexed more than 2,300 magazine articles (name of magazine, number of issue, title of article, writer, key-words, summary), which are written down and saved in the word processor and next recorded by the librarians in the Evonymos database. All the Evonymos personnel undergo training in this technology and in ways to provide services to blind library users.

Evonymos is the first library in Athens that uses equipment of this kind and offers use of the system to anyone interested, with special opening times for people with visual impairment. Note that the employee of the library is the first person with visual impairment hired through the Greek Manpower Employment Organisation (O.A.E.D.), who does not work as a telephone operator.

SOCIAL AND PROFESSIONAL INCLUSION OF THE BLIND IN GREECE

After centuries in which the blind were completely ignored, the Kallithea House of the Blind, founded in 1907, marked an important breakthrough. In 1932, while the official state was still "silent" on the issue, the blind became organized and founded the Panhellenic Association of the Blind, through which they set their own priorities and began to fight for their achievement during the '30s. In 1947, the Greek Lighthouse for the Blind was founded, and, in 1951, the Sun School for the Blind of Northern Greece was founded as well.

The '50s was a decade of much greater activity, which brought the first legal act concerning the blind and a royal decree regarding blind people attending secondary school and university.

There were sporadic measures taken during the '60s and even more in the early '70s. After 1974 and the restoration of democracy in Greece, the struggle of the blind for social rights was reinforced, culminating when the Panhellenic Association of the Blind staged a sit-in at the House of the Blind. Those actions bore fruit over the next decades, as they affected measures taken by the State regarding education, professional occupation and the everyday life of the blind in Greece.

Since finding a profession is considered the smoothest and most appropriate method of social inclusion, the blind people's movement has always considered professional education and training, provision of employment, improvement of working conditions and the solution of insurance and pension issues a major priority. Some milestones in this effort were:

- The founding of the School for Blind Telephone Operators in 1957.
- The 963/1979 law obliging employers to hire blind people for jobs which they can handle, that was improved with the 1648/1986 and the 2643/1998 law.
- Other laws enacted during the last years, which have significantly helped in the struggle of blind people for work and social inclusion.

**Nektarios
Paisios**

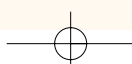
A BLIND PERSON'S EXPERIENCE AS A STUDENT AND AS A TEACHER

Many people consider sight as the most valuable of a person's possessions. It is believed, therefore, that a blind person's life is so difficult that they are in constant need of "special treatment", in other words, that disability renders the affected individual partly or wholly incapable of participating in any educational or social activity. Moreover, becoming a teacher is considered especially difficult – if not impossible – for a blind person. Through this address and first-hand experience I will try to refute all those myths about blindness.

First, I will refer to the academic studies of a person with visual impairment in the University of Cyprus. I will analyse the obstacles that the environment and the educational system puts in the way of this person and ways to overcome them. These obstacles include access to bibliography, attending lectures and taking notes, moving around (mobility) and the learning environment in general. There will also be reference to what comes after a blind person's studies in the Education Department and the results of such a choice. Finally, I will argue the need for certain supporting services which derive from a person-centred approach to the issue of disability rather from a normalisation one.

Next, I will focus on the social dimension of a blind person studying at a university. Taking my own experience as an example, I will explore the need for socialisation of people with visual impairment, the tensions that inclusion causes to the social context, and the social maturity that such an effort is bound to produce. More specifically, I will refer to the problem of socialisation from a blind person's point of view and the reasons this problem exists in the first place. Finally, I will make some proposals for the social education of blind people as well as the sighted, in order to achieve a broader and deeper socialisation.

The greater part of my address, however, will be dedicated to presenting my experiences as a teacher during my practice course at the University of Cyprus and the difficulties of such an undertaking, given the general belief that children do not easily accept "difference". I will try to refute the dominant





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Education and Blindness: Current Trends and Perspectives

**Alexis
Glinos**

prejudice that it is impossible – refuting at the same time the notion of “impossibility” – for a blind teacher to function in class.

Finally, I will review the difficulties caused by disability, which are related to above issues, aiming to expose the real nature of disability that derives from society’s inflexibility in accepting one another and its totally “xenophobic” approach to difference.

EDUCATIONAL INCLUSION OF THE BLIND IN GREECE. AN INCLUSIVE PROGRAMME AT THE 35TH PRIMARY SCHOOL IN PIRAEUS

This address begins with an historical review of the issue of educational inclusion for the blind.

It focuses on inclusive programs implemented in E.U. countries and in Greece.

It introduces the structure and function of group-inclusion and analyses the advantages and disadvantages of this model in comparison to the model of individual inclusion.

It gives a detailed picture of the implementation of the inclusive programme for blind pupils at the 35th Primary School in Piraeus, describing preliminary actions, construction of the necessary inclusive framework, aims of the pilot-programme, problems that occurred and how they were solved.

Finally, this address introduces steps aiming at the social inclusion of the blind, through implementation of the inclusive educational program and methods for its evaluation.

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