european
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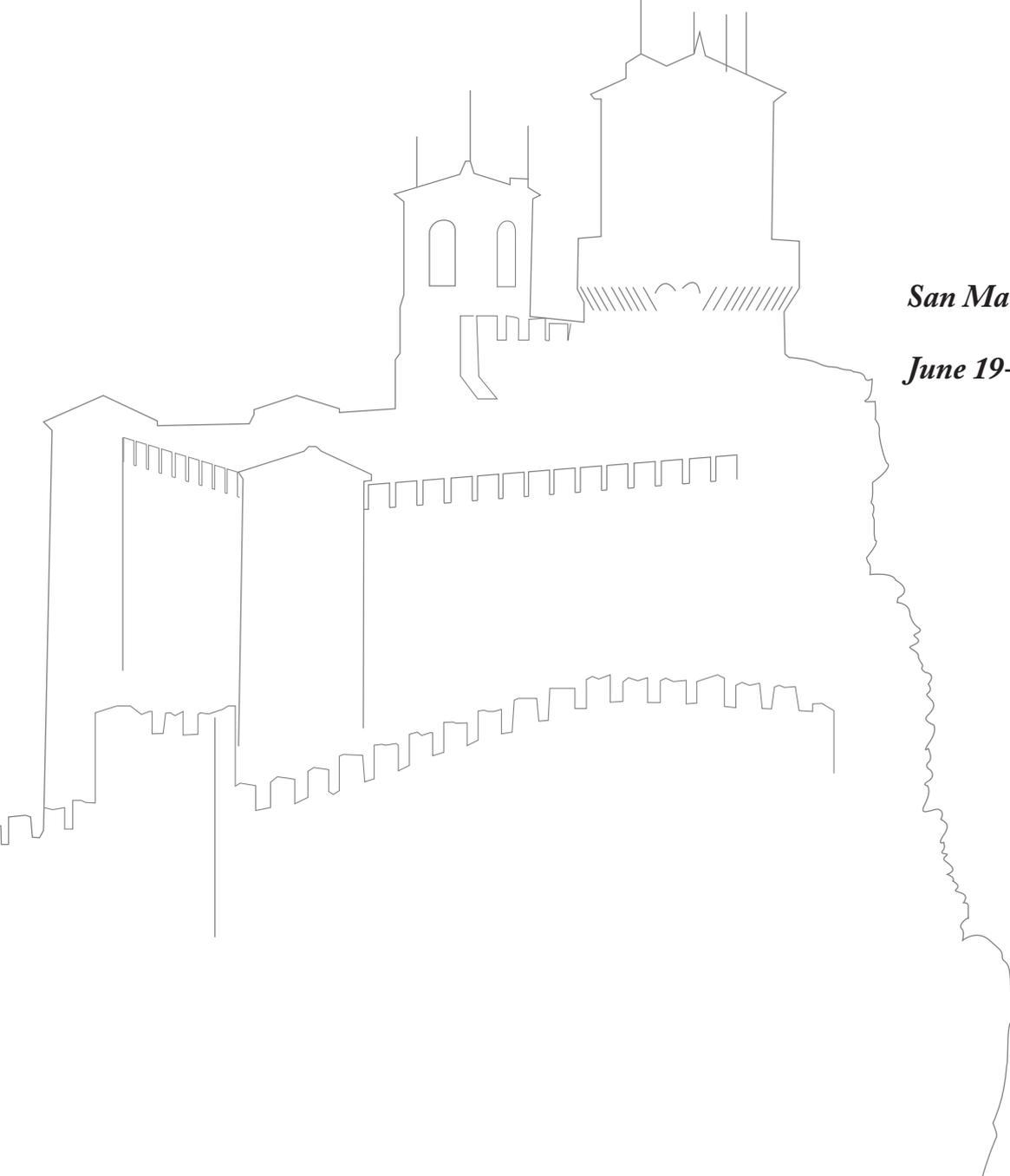New logo,
spring 2014

Summer Seminars 2014

Abstracts

San Marino

June 19–21, 2014

Day 1: Thursday June 19

A comprehensive approach for LD-students with a long term view on personal development.

Anny Cooreman, *Headteacher, Founder & Director of Eureka Leuven School*

A child with learning disorders is still a child with needs and dreams. Eureka has developed a comprehensive approach with short-term interventions and long-term vision. It takes into account the interests of the child himself, the parents, the school-environment and the professionals. We will focus on HOW teachers can adapt the educational setting through a better understanding of the nature of Learning Disabilities (LD). First the characteristics of LD will be discussed. Secondly, we will explain the Eureka principles of Universal Design of Learning (UDL) and the differences between teaching typical students and LD-students. Finally, we will explain and demonstrate specific Eureka teaching strategies. These strategies are universal and can be used in any school to make teaching more effective.

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ADHD and Autism Spectrum Disorder comorbidity issues in learning and behavioral profile: the role of the teacher.

Eleni Livaniou, *Chair of Hellenic Dyslexia Association*

The symptoms of Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) very often overlap. Most children on the autism spectrum have symptoms of ADHD – they are impulsive, they have difficulty with social interaction, limited attention span and tend to concentrate only on things that interest them. The new version of DSM-V allows the co-diagnoses of ADHD and ASD. Thus, acknowledging the fact that these two disorders could also appear as comorbid conditions.The presentation is going to deal with the issue of ADHD+ASD comorbidity from the educational perspective and the impact of such symptoms on learning and behaviour in the mainstream classroom.

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Attending the dys from the negative spiral of failing to the positive logic of succeeding

Catherine Quilici, *Chairman of the FEED (Federation of schools integrating students with learning disabilities in ordinary classes)*

Understanding a text is not an automatized routine, it is not just reproducing information, it supposes a thoughtful interaction between the reader and the text and this needs a time to postpone immediacy. It is integrating elements, explicit as well as implicit, in all registers (oral or written language, plans, fixed and

mobile images…) while, in the same time, building a representation. How to solve while building?
   We must consider that this activity requires a huge amount of skills:

- phonemic awareness, blending and directional tracking for a correct decoding
- language skills
- text features knowledge: concepts about print, punctuation, genres and text structures…
- vocabulary knowledge for the meaning of the words
- available academic and socio cultural knowledge
- inferential skills to collect the scattered elements of a text in order to build a coherent representation
- strategic skills to make and check predictions, interpretations...
- control skills to commit: am I right or wrong ?

It is obvious that students with learning disabilities are not provided with these skills.
   How to model and explain effective comprehension to help them to become strategic readers ?

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Online portal for supporting social inclusion of people with dyslexia The Literacy Project.

Eva Gyarmathy, *Research Institute for Psychology of the Hungarian Academy of Sciences*

Our aim is to create an advanced online portal to support the inclusion of dyslexic youth and adults in society. The features of the Portal:

- destined to users with dyslexia and other literal disadvantages
- in four languages: English, Hebrew, Czech, Hungarian
- online assessment
- supply of brain trainings
- assistive technologies and tips for effectiveness at everyday life, work and study
- human centered design
- interactive contact within the group of users.

Brain training and materials to cope better with the everyday challenges have been worked out. A carefully developed algorithm provides the background of the personalization.
   The personalization means

- real time feedback of the assessment results
- personalized brain training suggestions
- personalized tips for the everyday life
- personalized helpful tool suggestions for the coping with the difficulties.

The development of the Online Portal is based on former research results, moreover the project partners run several research to ensure the usability and effectiveness of the Portal   design and quality of the materials.

Our research

- support the best design for dyslexic users
- proved the higher than usual level creative activity of dyslexic youth and adults
- proved the effectiveness of dyslexic users in the use of the ICT
- proved the openness of dyslexic users to share experiences

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Dyslexia in the workplace

Margaret Malpas, *Chair of Brithish Dyslexia Association*

The BDA now trains Work Place Assessors, whose role it is to recommend Reasonable Adjustments within the workplace for individuals who experience a range of disabilities, including Specific Learning Difficulties/Dyslexia. This talk will outline the range and nature of the adjustments that are appropriate for Dyslexic individuals. This could include additional technology, strategy training, support staff and dyslexia awareness training for other staff. Employers are encouraged to adopt dyslexia friendly workplace practices and the BDA has a Code of Practice for Employers that sets these out clearly. This talk will report on the benefits and challenges experienced when working to bring about dyslexia friendly workplaces and effective strategies for campaigning and dyslexia awareness raising in society that are enabling positive change to take place.

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Day 2: Friday June 20

Procedural learning and dyslexia: theory into practice

Angela Fawcett, *Emeritus professor of Psychology, Swansea University*

In this talk I shall introduce the procedural learning deficit of dyslexia, (Nicolson and Fawcett, 2007) which suggests that children and adults with dyslexia will have particular difficulty in learning how to do things expertly, although their ability to learn facts may be unimpaired. The talk is illustrated with research findings which show difficulties in a range of tasks including blending skills together and consolidating learning overnight. Implications for practice will be discussed.

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Early identification of dyslexia

Kate Saunders, *CEO of British Dyslexia Association*

This talk will cover the early signs of possible 'at risk of dyslexia' in the 3-5 age range, and activities that can be used to build pre-literacy skills in that age range. It will also outline the indicators of possible dyslexia in the 6-8 year age range and the mechanisms through which these children may be identified. Checklists, screening, screeners and diagnostic assessments will be discussed, as well as appropriate adjustments that can be made in the classroom and through targeted intervention to support these children. Research findings on the benefits and necessary cautions around early identification will also be covered.

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Mathematical learning difficulties: Dyscalculia – or other factors?

Giannis Karagiannakis, *Research Center of Psychophysiology & Education, National & Kapodistrian University of Athens*

At present, the literature on mathematical learning difficulties, and on Dyscalculia, in particular, from the fields of cognitive psychology, neuroscience, and mathematics education appears to be fragmented and difficult to interpret for an educator who needs to effectively describe comprehensive cognitive and behavioral profiles of children in order to develop effective interventions in mathematics. In this lecture the author will present a new multidimensional etiological model proposing a transition from the unidimensional vision of "Dyscalculia" to the multidimensional Mathematical Learning Difficulties (MLD). The model was developed preliminarily through a deep analysis of the literature and the clinical experience of the author and his collaboration with a team of international researchers, and is based on a classification of MLD into four basic cognitive domains within which specific deficits may reside. The four domains are: Core Number, Memory, Logical, and Visuo-spatial (Karagiannakis, et al., 2014). The model is being confirmed as valid through a series of studies, one of which the author will report on in the current lectu-

re. The study was carried out on a normal population of 165 Greek 5th & 6th graders, that undertook a newly developed test computer-based consisting of 13 different tasks. The model has the ambition of diagnosing some basic root causes of the students' learning difficulties, by proposing a single comprehensive 'mathematical cognitive profile' that depicts four basic domains where possible deficits or strenghts may lay. The proposed model offers a multidisciplinary approach, which can contribute to assessing MLD in a more thorough and accurate way, as well as to the design of comprehensive targeted intervention programs, and thus become a precious tool to support both experts and classroom educators in identifying students' MLD profiles and in designing effective remedial interventions in mathematics. Finally, some case studies will be reported.

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Assessment of familial risk of dyslexia in children on the basis of the Polish adaptation of ARHQ

Katarzyna Maria Bogdanowicz[1], *Grażyna Krasowicz–Kupis*[1,2], *Dorota Kwiatkowska*[1], *Katarzyna Wiejak*[1,2]
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In recent years, interest in the issue of familial risk of dyslexia has increased and has been the subject of many studies conducted in Europe, the U.S. and Australia. Their results show that children who have a close family member with dyslexia are at greater risk of this disorder than children in the control group. Thanks to questionnaires like 'Adult Reading History Questionnaire' - ARHQ (Pennington & Lefly 2000, 2001) it is possible to predict the occurrence of specific difficulties in reading and writing long before a child's first attempts to master these skills, and even before an initial diagnosis of dyslexia risk. The Polish adaptation of ARHQ takes into consideration cultural differences between the USA and Poland as well as changes that have occurred within the last 12 years. Therefore some questions have been added (e.g. concerning ICT), some removed (e.g. concerning reading a newspaper on Sunday). In our research, the Polish adaptation of ARHQ was completed by 200 parents of children from the first and the even number of parents of children from the second grade. The results show its discriminative power and psychometric values (e.g. reliability). Our research is, as yet, the first attempt to use the 'Adult Reading History Questionnaire' in Poland. It was conducted by the Educational Research Institute in Warsaw and is part of a wider project which investigates early identification of specific reading and spelling disorders.

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Approaching dyslexia in bilinguals

Maja Kelić, *SUVAG Polyclinic, University of Zagreb*

Since dyslexia is the most common developmental disorder in school age children (Snowling, 2000), in contemporary multicultural Europe dyslexia in bilingual speakers is almost everyday challenge. Despite this fact, there is little research or practical guidelines for therapy of dyslexia in bilinguals. The aim of this presentation is to give the overview of theoretical assumptions regarding this issue and to introduce the verbotonal method which is based on a multisensory approach to language development and on prosody as the basis to speech development. One of the most important elements of the verbotonal method is raising awareness of the body in space and the integration of touch, proprioception, vestibular perception,

hearing and vision for the purpose of developing language. Since this method is initially developed for second language learning, it gives interesting frame for therapy of language disorders in bilingual context. Verbotonal method emphasizes importance of listening and speech perception as basic phonological skills. Since dyslexia is by most theories considered to be linguistically based disorder with core symptoms (or core deficit) connected to phonological processing, extensive phonological training using different modalities is proved to be very useful therapeutic tool.

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Neurological and behavioral research validates imagery-Language connection to dyslexia

Nanci Bell[1] & Angelica Benson[2],

[1]*Author, Co-Founder, Chief Executive Officer, Lindamood-Bell Learning Processes*
[2]*Director of Public Relations, Lindamood-Bell Learning Processes*

Imagery is a primary factor in cognition, word reading, and language comprehension. This presentation examines two types of imagery—symbol and concept. Many children and adults experience weakness in creating imagery which causes weakness in processing language and mathematics. Imagery-based, sensory-cognitive instruction is essential to addressing these weaknesses, especially for children diagnosed with dyslexia and autism spectrum disorders.

Nanci Bell is the author of four instructional programs based on twenty-five years of instructional experience and clinical and behavioral research. Her work is supported by Paivio's Dual Coding Theory (DCT), a general theory of cognition.

Ms. Bell will present the findings from recent peer reviewed research, including functional Magnetic Resonance Imaging data. The first study examines behavioral and neurological changes in students with dyslexia who received instruction designed to stimulate symbol imagery. The second study examines behavioral and neurological changes in students with ASD who received instruction designed to stimulate concept imagery.

Correlational and predictive results will also be presented regarding students from a variety of backgrounds, diagnoses, and needs. Data will include students' post-instructional results on assessments of the component parts of reading including word attack, word recognition, vocabulary, phonemic awareness, and oral and written language comprehension.

The emphasis of the presentation is to illuminate the sensory input of imagery as the first domino essential to monitoring, self-correction, and independence in language and literacy skills.

References:

Bell, N. (2007). *Visualizing and Verbalizing for language comprehension and thinking*. San Luis Obispo, CA: Gander Publishing.

Bell, N. (2013). *Seeing Stars: Symbol Imagery for Phonological and Orthographic Processing in Reading and Spelling*. Avila Beach, CA: Gander Publishing.

Bell, N. (2013). *Symbol Imagery Test: Examiner's Manual.* Avila Beach, CA: Gander Publishing.

Krafnick, A.J., Flowers, L, Napoliello E.M. & Eden, G.F. (2011). *Gray Matter Volume Changes Following Reading Intervention in Dyslexic Children*. NeuroImage, 57(3), 733–741.

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Good start method – new-old method of supporting children

Marta Bogdanowicz¹, *Katarzyna Maria Bogdanowicz²*, *Marta Łockiewicz¹*
¹University of Gdańsk, Poland, ²Educational Research Institute in Warsaw, Poland

Good Start Method (GSM) has been developed by Marta Bogdanowicz as a result of her more than 41 years of experience in working with children, including those with special educational needs. GSM was inspired by the French Bon Départ, created by T. Bugnet Van der Voort as well as theoretical assumptions and good practices in preschool education, special and primary education based on the ideas of such authors as J. A Comenius, Montessori etc. In 1985 the first textbook for GSM was published and in 1996 the first program of activities for children of preschool age and intellectual disabilities appeared. GSM is constantly evolving, drawing on the experience of people using this method with children aged 2 to 10 years. The main goal of MDS is to support the child's psychomotor development through a well-organised, fun and multisensory learning of graphic symbols. Implementation of this objective has been carried out by the development of visuospatial functions, language, auditory-motor and intellectual abilities that are involved in reading and writing activities. Other objectives are to foster the development of lateralization, consciousness and the body schema. It is used for prevention of school failure, identification of the causes and correction of disorders, as well as in education. This method prepares pre-school children to learn to read and write. At the same time it can be used in drawing geometric figures and learning letters and numbers in the first year of primary school. GSM is therefore a universal multisensory method that allows you to work with SEN children of different ages. Marta Bogdanowicz, Marta Łockiewicz and Katarzyna M. Bogdanowicz took up the challenge to adapt the GSM into English. Good Start Method for English is a method to teach English, which also has the advantages of the original GSM. It can therefore be successfully used also for preventive, diagnostic and therapeutic purposes. In 2011, a project was started in which the effectiveness of GSM was tested in a group of five- and six-year old children in kindergarten and school. During the workshop, the authors will present theoretical assumptions of GSM as well as the recently released film: Good Start Method for English. It shows an English lesson for children in the pre-school class in which this method was applied.

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Dreams are future, ICT, English

Philippe Rosado, *Vice President of Anapedys (Association Nationale d'Associations d'Adultes et de Parents d'Enfants Dys)*

Future for dyslexia moves as fast as digital technologies: is this a freedom revolution for dyslexia? Two key topics:

–Digital or human support?

What role do humans play to use Information and communication technologies (ICT) successfully to help dyslexic students in the learning ecosystem? The technology enhances social inclusion, autonomy and confidence in future to the limits of abilities, as an extension of human supports - speech therapist, individual tuitions✝, which can't run in the long term. But is everything so easy? The use of technology may mask problems and adults continue to play a significant role in providing support. Currently, investment is focused on the technology, forgetting the learning eco-system. Before, parents were familiar with their child's learning environment, tablets changed the rules. how to familiarise them with ICT?

–English: future or past tense?

English language is mandatory in higher education: what risks for dyslexic students? Dyslexia is critical in irregular languages as English is. In France, foreign language exemption can be asked in high school. How about at university ? What do digital technologies bring? Camera of a Windows phone pointed to the text, listen immediately to the translation, 35 languages! Order your menu just talking to your phone! Huge startups investments. Google is on the fight.

    AIMS: access to universal knowledge and cultural exchanges for everybody, this means INCLUSION.

    We are best with our mother tongue. Currently English is key, but untill when?

    Drive to the future looking back?

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Day 3: Saturday June 21

"Intelligent" artifacts for low achievers in mathematics

Maria Giuseppina *Bartolini Bussi, Dipartimento di Educazione e Scienze Umane, Università di Modena e Reggio Emilia*

I shall report on some studies developed by my research team to help students to construct mathematical meanings and skills for the solution of word problems. The theoretical framework exploits Vygotskian theoretical construct of semiotic mediation and other findings (Bartolini Bussi & Mariotti, 2008). "Intelligent" artifacts, such as bee-bot, counting sticks, the pascaline zero+1, the number line, with suitable tasks designed by teacher, has a great semiotic potential for the whole classroom and can link a task, within the students' reach and under the teacher's guidance, with a piece of the mathematics to be taught, according to school standards. The artifact is a psychological tool (in the Vygotskian sense) rather than a compensatory tool for students with special needs. Nevertheless the systematic recourse to these artifacts and the possibility of leaving them available in the classroom for months and even years may help low achievers (and even students with special needs) to reconstruct and memorize some skills which have been interiorized as automatisms by other students. As a young students told: if one is myopic and does not see well, s/he needs glasses; if one is not able to make written additions or subtractions, s/he needs the counting sticks or the pascaline.

References

Bartolini Bussi, M.G. & Mariotti, M.A. (2008). Semiotic mediation in the mathematics classroom artifacts and signs after a Vygotskian perspective. In L. English (Ed.), *Handbook of international research in mathematics education* (2nd ed). New York: Routledge. pp. 746-783.

Baccaglini-Frank, A., Ramploud, A. & Bartolini Bussi, M.G. (2012). *Informatica zero: un percorso formativo per insegnanti di scuola dell'infanzia e primaria*, EduTouch.

Bartolini Bussi M.G., Ramploud A., Baccaglini-Frank A. (2013): *Aritmetica in pratica: Strumenti e strategie dalla tradizione cinese per l'inizio della scuola primaria*, Trento: Erickson.

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An analysis of a student's visuo-spatial difficulties in coordinating different perspectives

Samuele Antonini[1] & Anna Baccaglini-Frank[2],
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We will report on a study that gives insights into how Logo-like microworlds can affect cognitive development related to mathematics education of students with math learning difficulties. In particular, we analyse the case of a 15-year-old student with dyslexia and severe dyscalculia. Among the various cognitive aspects involved, here we delve into the development of his perspective-taking ability. Through critical episodes in the student's interaction with the software, guided by the help of a special education teacher, we outline an enhancement of the student's ability to juggle two different allocentric frames of reference. Such enhancement occurred thanks to the specific tasks proposed, the interventions of the teacher (e.g.,

the use of particular expressions and words) and the functionalities of the microworlds, which required continuous juggling between two reference frames. Although this juggling was not spontaneous for the student, due to his disabilities, there was a positive development of his perspective-taking ability. In particular, we observed a transition from not being able to manage an object-centered perspective, and trying to find a way of making sense of the command icons, to recognizing this perspective and trying to embrace it, after a period when the student's confusion depends on his simultaneous use of two incompatible frames. Some difficulties persisted but they were partially overcome through different compensatory strategies.

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A proposal of strategies for addressing and overcoming learning difficulties in mathematics from early arithmetic to geometry and algebra.

[1]Elisabetta Robotti & [2]Anna Baccaglini-Frank,

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The teaching strategies and materials developed in two Italian projects on learning difficulties in mathematics will be presented to the participants, including some of their fundamental theoretical grounding notions. The strategies involve the use of digital and physical artifacts to help students, in whole class situations, construct mathematical meanings, within the theoretical construct of semiotic mediation (Bartolini Bussi & Mariotti, 2008). The Italian projects of reference are: PerContare and Mathematics education to support students diagnosed with developmental dyscalculia in school inclusion.

The PerContare project (ASPHI, 2011) is an Italian inter-regional 3-year project (2011-2014) aimed at developing effective inclusive teaching strategies and materials to help primary school teachers (in grades 1, 2, and 3) address learning difficulties, especially of students who are potentially at risk of being diagnosed with developmental dyscalculia (DD students, Butterworth, 2005). Each year the materials developed are field-tested in at least 15 experimental classrooms and re-tested the year after in new classrooms (of the same grade level), and individual training materials are tested during one-on-one interactions between special educators and children with difficulties. Children in all experimental classes undergo two collective screening sessions, in February and in May. The materials considered to be most effective will be presented at the workshop.

The project Mathematics education to support students diagnosed with developmental dyscalculia, in school inclusion, is an Italian inter-ateneo 2-years project (2013-2014), developed on cases studies and addressed to students of upper secondary school. It is aimed at developing effective inclusive teaching strategies to support students with difficulties in mathematics and, above all DD students, in developing meanings for algebraic objects. As matter of fact, we advance the hypothesis that, some of the difficulties encountered by DD students in algebraic activities, could be due to the lack of meaning given to the algebraic notions to be treated.

In this work, we refer to digital technology since it makes multiple representations available and gives the opportunity to act on them. Indeed, research in learning with technological tools have shown that they are very useful in the generation of learning environments where students have richer opportunities to construct mathematical meanings, to explore and experiment with mathematical ideas, and to express these ideas using a wide range of representations.

For this reason, we focus our research on AlNuSet (Algebra of Numerical Sets, www.alnuset.com), a new dynamic algebra software, designed for students of lower and upper secondary school (yrs 12-13 to 16/17). Some research results concerning effective inclusive teaching strategies to support students with difficulties in mathematics and DD students in developing algebraic meanings will be presented and discussed.

References

ASPHI (2011). PerContare. Visited 3 Mar 2014 at percontare.asphi.it

Bartolini Bussi, M.G. & Mariotti, M.A. (2008). Semiotic mediation in the mathematics classroom artifacts and signs after a Vygotskian perspective. In L. English (Ed.), *Handbook of international research in mathematics education* (2nd ed). New York: Routledge. pp. 746-783.

Butterworth, B. (2005). Developmental Dyscalculia. In, J.I.D Campbell (ed.), *Handbook of Mathematical Cognition*. New York: Psychology Press. pp. 455-467.

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Confrontation naming and reading abilities at primary school: a longitudinal cohort study.

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Introduction: Confrontation naming tasks, in particular the Boston Naming Test (BNT), are useful in the assessment of children with learning and language disorders. The aims of this study were: 1) to provide Italian longitudinal normative data on confrontation naming; 2) to investigate the role of socioeconomic status (SES), intelligence, age and gender in confrontation naming; 3) to identify correlations between confrontation naming and reading abilities (fluency, accuracy, comprehension).

Method: We conducted a five-year longitudinal investigation of confrontation naming in a non-clinical sample of Italian primary school children (n=125), testing them at the end of each school year, to assess non-verbal intelligence, confrontation naming and reading abilities.

Results: In our study, performance on the BNT emerged as a function of IQ and SES. We found significant correlations between confrontation naming and reading abilities, in particular comprehension; BNT scores correlated better with reading fluency than with reading accuracy.

Conclusions: Our study provides longitudinal normative data for a confrontation naming task frequently used in clinical practice (the Boston Naming Test), and focuses on correlations with reading abilities, intelligence, age, gender and socioeconomic status.

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An analysis of perception through the narrative of the self in students of primary school with dyslexia

Gian Marco Fulgeri, Francesca Scortichini, Maristella Scorza, Giacomo Stella,
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This research focuses on the mechanisms of Self-construction through the narrative creation of Self. The purpose is to evaluate the perception of reality and the elaboration of self in people with dyslexia.

In fact, the functional difficulties of reading and writing due to Specific developmental disorders of scholastic skills may generate two main "steps" of re-elaboration of personal Identity: pre- and post-diagnosis. The diagnosis creates a "turning point" in the elaboration of their own identity and a redefinition of difficulties. However, these processes do not always lead to a proper individual or social adaptation.

Within the investigation we have been used several tests for the evaluation of personality traits and emotional and affective aspects (in press). It was also used as a main instrument the narrative of the self and from an "open-interview" we developed a multiple choice questionnaire for the analysis of different aspects of personal identity (Fulgeri, 2012)

During the analysys it appears that the perception seems to be regulated by three main aspects: 1) Understanding: regarding the meaning attributed to the object; 2) Acceptance: concerning the adaptation with the object to one's personality, or its cohabitation; 3) Psychological Compensation: inherent in the structure that the object has is in the subject's life. This aspect is also inherent in the processing of the personal future and the sense of self-efficacy.

This analysis can be used for any object of our perception, both external and internal.

Therefore, the primary aim of this research was aimed at investigating the perception that each person with dyslexia has about its own difficulties in reading and writing. In addition to functional deficits there are several other factors - both internal and external – which help to create a perception of reading and writing difficulties which do not always coincide with their objective difficulties detected by neuropsychological assessment.

This perception is also important for the definition of compensatory measures in school, the sense of self-efficacy and self-definition in social, family and school context.

Another aspect was to investigate which elements of uneasiness could be an obstacle to a correct processing of personal identity and appropriate social inclusion in subjects with dyslexia.

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Laws and norms about dyslexia in Europe

Enrico Ghidoni, Clinical Neuropsychology Unit, IRCCS Arcispedale S.Maria Nuova, Reggio Emilia

The norms about dyslexia are constantly changing and quite different in European countries, highlighting a general framework in which many states are still far from optimal regulation of the matter. Through the collaboration of the European Dyslexia Association (EDA), a questionnaire was sent to all association members. Replies were received from 13 countries, which has produced a quite detailed and extensive view. In most countries there are laws, very often not specific to the learning disabilities but aimed at all types of disabilities. In many cases these norms are deemed to be inadequate or insufficiently implemented in practice. The laws in most countries are concerned with the school curriculum, more rarely also with the university and the world of work or other social issues. The diagnosis by a health professional or a team is often required, but in some countries an assessment of a specialist teacher may be sufficient. The measures of support provided in the various countries are very variable in quality and quantity. In general,

many countries are equipping themselves with an inclusive approach rules, but is still present the use of special classes or special schools for learning disabled pupils.

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Poster session

Executive functions in Dyslexia, ADHD and Comorbid ADHD/Dyslexia

Doyle, C., & *Boran, L., School of Nursing and Human Science, Dublin City University, Ireland*

The symptomatic expression of dyslexia (impaired reading and writing) and attention deficit hyperactivity disorder (severe inattention) appears unrelated. Yet, both disorders co-occur more frequently than chance (Gilger, Pennington, & DeFRIES, 1992); and similar genes seem to be implicated (Gayan et al., 2005). This suggests the potential of a shared cognitive risk factor. The executive function system (umbrella term used to describe a triad of high-level cognitive processes such as mental updating, flexibility and impulse control) (EF) is found to mediate the gene-symptom expression; is implicated in developmental disorders (autism spectrum disorder and ADHD); and is predictive of reading ability- making it a candidate risk factor of both dyslexia and ADHD. EF deficits are found in dyslexia (Brosnan et al., 2002), ADHD (Barkley, 1997) and comorbid ADHD/dyslexia (Willcutt, Pennington, Olson, Chhabildas, & Hulslander, 2005). While there are consistent findings of EF impairments in ADHD, the consensus on EF impairments in dyslexia is less clear, with some studies finding EF impairments (Beneventi, TØNNESSEN, Ersland, & Hugdahl, 2010). The exact EF profiles of dyslexia, ADHD, and the comorbid group; and how EF relates to academic achievement and symptom expression in each group remains unclear. This pilot series of case studies aim to examine the EF profile of Dyslexia, ADHD, and Comorbid children using a diverse battery of EF tasks, educational outcome and symptom expression measures pre and post an online EF training task that will adaptively train the EF triad. In line with the recent changes to the National Institute of Mental Health research criteria for understanding underlying factors associated with distinct clinical disorders and their comorbidities, we aim to examine how EFs predict and modulate symptom expression in these clinical conditions.

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Exploring reading skills in function of different types of musical expertise

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Recent research suggests important links between aspects of music processing, language and reading. This collaborative research is part of a new field exploring the relationship between language and music, in which it has been suggested that musical practice may act as a facilitating or protecting factor in supporting some of the abilities associated with auditory processing that are crucial for reading development. The reading skills of three adult groups aged between 18 and 55 years (with native or near native English) were assessed: [a] individuals with literacy in music (≥8 years formal musical training), [b] individuals with expertise but no literacy in music (≥8 years choir singing), and [c] individuals with no musical training or practice. Participants completed a background questionnaire on their reading and musical habits before their reading speed and accuracy were assessed using 3 prose passages from the Roehampton Adult

Reading Test. The Symbol Digit Modalities Test was administered prior to the reading assessment in order to exclude Specific Learning Difficulties (SpLD). Data collected so far indicate a significant effect of musical expertise on reading ability in English, independently from musical literacy. It is intended that this study will form the basis of further research into reading and music in SpLD musicians and non-musicians.

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Specializing in significant language difficulties (severe dyslexia and dysphasia) in Saint Charles's institute.

Malnoury, C., Vincent de Paul foundation

Institute St. Charles in Strasbourg, is run by a large foundation - Foundation Vincent St Paul- that owns, manages and directs many schools, retirement homes, medical clinics, and hospitals in the Alsace and Lorraine regions in France.

Created by the Congregation of the Sisters of Charity, the Foundation was recognized as a public utility by decree of the French State Council on 26 December 2000.

The Saint-Charles Institute - ITEP (Institute for Therapeutic, Educational and Teaching) and SESSAD (Special Education Services and Home care), welcomes children aged from 6 to 14 years with severe and enduring written and oral language disorders and associated difficulties. It's characterized by disorders of written language (dyslexia) and spoken language disorders (dysphasia). Also, there is great suffering within their environment.

The mission of the Institute is to foster children for whom other attempted interventions in the traditional school context were not sufficiently operating while taking into account their associated difficulties.

The institute consists of three services: therapeutic, social work and teaching. The bases of support are established by these professionals within an individual project allowing each child to develop according to their needs. The children and parents are associated with aiding in the development of the child's project. After conducting assessments the child' diagnosis is determined and the educational & therapeutic paths are defined on the needs of children.

Two possibilities of instruction:

- In a specialized class or a traditional classroom at a regular school with the help of the SESSAD (45 places);

- In a class at Saint-Charles including rehabilitations and intensive interdisciplinary therapeutic interventions (63 places - 7 classes). + a boarding school.

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Lim "leggibile" Book

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Abstract: Learning objects are suitable for inclusion in classes of pupils with different abilities, certifica-

ted L.104/92 L.170/11 or, more generally included in the SEN. Anyone, involved in a learning process, has the same right to learn "not like everyone else", but "with the same opportunities" which involves the use of methods, strategies, different times and ways.

Una proposta per lezioni digitali inclusive

Lo scopo del presente lavoro è quello di costruire oggetti di studio adatti a una didattica inclusiva in classi di alunni con diverse abilità, certificati l.104/92 o L.170/11 o, ancora, inclusi più genericamente nei BES. Tutti gli attori del processo di apprendimento hanno la stessa dignità di apprendere, "non come tutti glialtri", ma " con le stesse *opportunità*" con l'uso di mezzi, strategie, tempi e modalità differenti.

Lo studio di quanto già in letteratura ci ha portato a proporre e sperimentare, in percorsi di ricercaazione, come potrebbe migliorare l'apprendimento dei singoli proponendo una successione di lezioni, progettando gli oggetti con l'obiettivo specifico di rendere le lezioni, 1) ad alta leggibilità, 2) facilitate e accessibili 3) multimediali e in progress. Abbiamo fatto scelte precise sul colore dello sfondo e dei font, per ottenere il giusto contrasto e non affaticare la vista, abbiamo inserito le registrazioni vocali, attivabili con un click, su tutto il testo scritto. Nella presentazione a schermo per la classe il testo compare grazie al click di attivazione ma nella stampa è sempre in primo piano senza che sovrapposizioni alle immagini diminuiscano la leggibilità.

Il materiale prodotto può essere stampato per tutti in formato *.pdf grazie alle possibilità di esportazione offerte dal software della stessa LIM, visualizzato pagina per pagina, per gli alunni con difficoltà di lettura o 3 immagini per pagina con uno spazio per le annotazioni laterali (appunti individuali) infine con 6 schermate per pagina

Il *vantaggio* della facilitazione, con la stesura di testi basata su concetti chiave, potrà inoltre essere di aiuto a tutta la classe, e grazie ad un'attività di studio condiviso potrà essere ampliato a partire dagli spunti delineati.

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Arriva Un Bastimento Carico Di… - (A loaded cargo is about to arrive…)

Di Gianfelice, *S., De Santis, R., & Ceccarelli, I., Speech therapist Riah Riabilitazione- Rieti, Italy*

The most recent epidemiological research, conducted in the Italian context, has shown how the first difficulties and then learning disorders, constitute a problem of significant magnitude that frequently leads to academic failure with the consequent risk of premature abandonment of the education system. Several longitudinal studies have demostrated that early diagnosis and systematic intervention can play a positive role in determining the evolution of learning disorders of children with these difficulties. The ability to predict the qualitative characteristics and temporal evolution of academic learning is given by the evaluation of the level of development of critical precursors, defined by the literature " prerequisites ". According to many authors, the metaphonological skills constitute the most powerful predictor of the success in the initial acquisition of reading and writing. Metaphonological skills are critical for speaking intelligibly and acquiring phonic skills necessary for reading. The objective of this work is to share the metalinguistic intervention model that we propose to preschool children in an ecologic way through a laboratory full of games like nursery rhyme cloze, syllable blending and segmentation, onset-rime blending and segmentation, therefore encouraging them to improve phonological awareness and reflection and so facilitating their approach to reading and writing during the very early stages of school education . The group offers a double benefit: firstly, it creates a more relaxed environment, increasing the motivation to strengthen speech therapy, on the other hand triggers the mechanisms of competition that enhance the involvement of children during the meetings.

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Nuovi Strumenti E Metodologie Per Un'inclusione Didattica E Sociale Di Persone Con D.s.a.

La Rocca, D., *Canalescuola Cooperativa Sociale onlus – Sozialgenossenschaft*

Introduzione: la letteratura dimostra come gli alunni con Disturbo specific dell'apprendimento risultano spesso impermeabili ai comuni sistemi di apprendimento. La presente ricerca indaga sulle metodologie e gli strumenti didattici rivolti ad incrementare l'autonomia nello studio delle persone con DSA.

Partecipanti: il campione è composto da 104 studenti dell'età compresa tra i 9 e i 14 anni, provenienti dalla Provincia di Bolzano, dal Veneto, dalla Liguria, dalla Lombardia e dall'Emilia Romagna (maschi 75 - femmine 29); 104 genitori; 112 insegnanti.

Protocollo di osservazione – Metodi

AREA DEGLI APPRENDIMENTI: agli studenti sono state somministrate diverse prove rivolte ad indagare competenze di tipo trasversali: lettura di brani, comprensione, capacità di categorizzazione, capacità di elaborazione e sintesi delle informazioni. Durante la prima somministrazione (test) gli alunni hanno affrontato le prove in modo tradizionale (carta e penna); durante la seconda somministrazione (retest) hanno potuto utilizzare gli strumenti compensativi seguendo una metodologia didattica centrata sugli aspetti metacognitivi. L'arco di tempo intercorso tra le due somministrazioni è di circa 3 mesi. Dopo un training didattico della durata di 15 ore (10 interventi da 1,5 h ciascuno), basato sulla pratica di nuove strategie didattiche, gli alunni hanno sostenuto i test in uscita (retest). Inizialmente nessun alunno conosceva il metodo didattico proposto e gli strumenti compensativi informatici.

AREA DEL SÉ: ai partecipanti (studenti, genitori, insegnanti) sono stati somministrati un test e un questionario ad hoc allo scopo di comprendere se l'autostima e la motivazione (auto percepita) cambiassero di livello nel corso dell'esperienza trascorsa in Laboratorio.

Protocollo di valutazione:

"TMA - scuola" - "QAS" - "Questionario alunni" – Prove standardizzate Amos - esercitazioni specifiche.

Ipotesi 1: gli alunni con DSA presentano bassa autostima e motivazione allo studio.

Ipotesi 2: gli alunni con DSA presentano un metodo di studio poco funzionale all'apprendimento.

Risultati: nel complesso la batteria somministrata al campione preso in esame ci indica quanto e come un metodo di studio personalizzato, centrato sull'uso consapevole delle strategie per aggirare gli ostacoli all'apprendimento, favorisca in un tempo limitato, maggiori capacità sul piano del rendimento scolastico, maggiore autostima e motivazione. Rispetto ai tempi di esecuzione delle prove emerge un aumento sensibile, ma allo stesso tempo una maggiore percentuale di risposte date e di risposte corrette. Questo ci fa ben sperare che gli alunni con DSA, se messi nelle condizioni appropriate, possano godere di un benessere maggiore a scuola, a casa e di conseguenza nella società in cui vivono.

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