

**Education and New Developments**  
**2017**

**Edited by**  
**Mafalda Carmo**

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## FOREWORD

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This book contains a compilation of papers presented at the International Conference on Education and New Developments (END 2017), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.).

Education, in our contemporary world, is a right since we are born. Every experience has a formative effect on the constitution of the human being, in the way one thinks, feels and acts. One of the most important contributions resides in what and how we learn through the improvement of educational processes, both in formal and informal settings. The International Conference seeks to provide some answers and explore the processes, actions, challenges and outcomes of learning, teaching and human development. The goal is to offer a worldwide connection between teachers, students, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in educational issues. We take pride in having been able to connect and bring together academics, scholars, practitioners and others interested in a field that is fertile in new perspectives, ideas and knowledge.

We counted on an extensive variety of contributors and presenters, which can supplement our view of the human essence and behavior, showing the impact of their different personal, academic and cultural experiences. This is, certainly, one of the reasons we have many nationalities and cultures represented, inspiring multi-disciplinary collaborative links, fomenting intellectual encounter and development.

END 2017 received 581 submissions, from 55 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. The conference accepted for presentation 176 submissions (30% acceptance rate). The conference also includes a keynote presentation from an internationally distinguished researcher, Professor Lizbeth Goodman, Chair of Creative Technology Innovation and Professor of Inclusive Design for Learning at University College Dublin; Founder/Director of SMARTlab, Director of the Inclusive Design Research Centre of Ireland, Founder of The MAGIC Multimedia and Games Innovation Centre, Ireland, to whom we express our most gratitude.

This conference addressed different categories inside the Education area and papers are expected to fit broadly into one of the named themes and sub-themes. To develop the conference program we have chosen four main broad-ranging categories, which also covers different interest areas:

- In **TEACHERS AND STUDENTS**: Teachers and Staff training and education; Educational quality and standards; *Curriculum* and Pedagogy; Vocational education and Counseling; Ubiquitous and lifelong learning; Training programs and professional guidance; Teaching and learning relationship; Student affairs (learning, experiences and diversity; Extra-curricular activities; Assessment and measurements in Education.
- In **PROJECTS AND TRENDS**: Pedagogic innovations; Challenges and transformations in Education; Technology in teaching and learning; Distance Education and eLearning; Global and sustainable developments for Education; New learning and teaching models; Multicultural and (inter)cultural communications; Inclusive and Special Education; Rural and indigenous Education; Educational projects.
- In **TEACHING AND LEARNING**: Educational foundations; Research and development methodologies; Early childhood and Primary Education; Secondary Education; Higher Education; Science and technology Education; Literacy, languages and Linguistics (TESL/TEFL); Health Education; Religious Education; Sports Education.
- In **ORGANIZATIONAL ISSUES**: Educational policy and leadership; Human Resources development; Educational environment; Business, Administration, and Management in Education; Economics in Education; Institutional accreditations and rankings; International Education and Exchange programs; Equity, social justice and social change; Ethics and values; Organizational learning and change, Corporate Education.

This book contains the results of the research and developments conducted by authors who focused on what they are passionate about: to promote growth in research methods intimately related to teaching, learning and applications in Education nowadays. It includes an extensive variety of contributors and presenters, who will extend our view in exploring and giving their contribution in educational issues, by sharing with us their different personal, academic and cultural experiences.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, and of course, to our organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future,

Respectfully,

Mafalda Carmo  
World Institute for Advanced Research and Science (WIARS), Portugal  
*Conference and Program Chair*

Lisbon, Portugal, 24 - 26 June, 2017

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## DEVELOPMENTAL DYSGRAPHIA AND ITS PREVENTION. WHAT EDUCATIONAL ACTIVITIES?

Angelo Luigi Sangalli<sup>1</sup>, Angelo Lascioli<sup>2</sup>, & Andrea Lascioli<sup>3</sup>

<sup>1</sup>Professor of Special education – University of Verona (Italy)

<sup>2</sup>Professor of Inclusive education – University of Verona (Italy)

<sup>3</sup>Expert in the assessment and treatment of learning disabilities and expert in cognitive science (Italy)

### Abstract

Dysgraphia is a problem that involves from 5% to 33% (Overvelde & Hustijn 2011) of European school population. The present work proposes special educational research on 3 to 6 years old children, to identify probable predictors of dysgraphia, with a preventive aim. The work presented here concerns a series of indications, collected through a special educational work that has allowed to develop a prevention program. The article also presents a series of practical, educational guidelines, whose application has proven to be effective in recovering situations where handwriting is difficult.

**Keywords:** *Dysgraphia, prevention, specific learning disorders, motor education.*

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### 1. Introduction

The University of Verona, The Department of Human Science, Inclusion and Special Education, has developed a program to assess possible specific learning disorders (specifically, dysgraphia) and to generate a series of educational interventions that - if implemented early - can improve children's handwriting skills. (Lascioli, 2011)

In particular, the research has allowed to identify some pre-requisites which are closely related to the correct development of handwriting skills. In this article we argue that these (if absent) can predict the possible onset of the handwriting disorder. Through a systematic work of observation and analysis, it was possible to define a prerequisite evaluation scheme, useful to obtain a good handwriting. From here, we started to examine possible interventions to recover prerequisites - whether absent or deficient - to develop a true protocol for prevention / intervention of dysgraphia.

The work presented here, has been experimented in 5 nursery schools, where prerequisite evaluation and recovery activities have been carried out and supervised.

### 2. Correct Handwriting prerequisites

The observations collected during the research process allowed us to identify correct handwriting prerequisites. (Sangalli, 2011)

#### *Head and shoulder control*

Observation and research have shown it clear, that in a child who does not control his head well and/or does not have a good shoulder tone, there may be problems in the use of arms during handwriting. The graphic gesture, in these cases, is done with excessive effort. For example, you may notice excessive shoulder movement. The gesture is therefore heavy and gross. Even the hand grasp is high and the wrist does not lean on the horizontal plane (this condition usually occurs in hypotonic children). The child shows his head embedded in his shoulders and if he has to turn himself, his eyes and head are unable to perform any anticipatory or independent movement from the trunk. Even when child is walking, the movement is not coordinated.

#### *Proper Muscle Tone*

The lack of proper muscle tone implies severe fatigue in handwriting. Lack of muscle tone does not allow a proper hand grasp when the use of the graphic tool is necessary. The child becomes tired easily, constantly changing it from one hand to the other often willing to abandon the task. (Sangalli, 2011)

#### *Stable sitting position*

The child who sits badly in a chair, does not support his feet on the ground or lays his arms on a table too high for his elbows, is constantly in search of postural adjustments that interfere with graphic production. A stable sitting position, however, allows a better attention at the motor task, especially in children with poor motor control.

*Hand (tactile sensitivity)*

The tactile organization of hands and fingers allows to handle the graphic tool. The child with good tactile sensitivity can properly perceive the instrument and create a scale of the force needed for its proper use. When tactile sensitivity is altered, children can hold the instrument too strong between the fingers (to feel it better) with the result that even the tract is over marked. In these cases, the child usually gets tired and gives up. On the other hand, other children, due to tactile sensitivity problems, hold the graphic tool without the proper strength for the task. In these cases, their tract looks very light and unmarked. The pencil slides out of their hands and the tactile sensitivity of the hands also causes a motor delay in the evolution of manual skills. (Sangalli 2012)

*Visual convergence and attentive keeping*

A correct visual convergence is what allows a child to look at the table at 20-40 cm from his face, enabling him to explore an image, as well as write and draw. Visual convergence issues can produce specific behaviours as, such as colouring, looking around during an action (colouring), stop looking at the sheet while a task is not completed. Actually, convergence problems explain why eyes do not follow what hands are doing. (Larocca & Sangalli, 2010)

*Brain dominance*

It has been observed that children who delay the choice of the dominant hand, are more problematic than others to organize a specialized motor scheme. The problem also arises when the non-dominant limb is selected (or by constraint or because the child is not able to independently determine his dominant limb).

*Coordinated walk*

We have found a significant correlation between a coordinated walk and a difficulty in writing. Pupils with handwriting problems (resulting from grasp and control problems during coloring) also have problems with walking coordination.

*Correct hand grasp*

Correct hand grasp is related to the learning of graphic motor scheme suitable for handwriting. Grasping correction, therefore, has shown an improved handwriting. However, correction cannot be done simply by writing. The repetition, in this case, is not good at all. Better, however, to take action using strategies suitable to generate a correct handwriting scheme. This takes time and practice. It rarely comes from a spontaneous self-correction of the child. It is better to teach the child how to improve his grasp, making him gradually abandon any incorrect scheme.

*Hand-eye coordination*

Hand-eye coordination is a fundamental intervention field in writing education. This field of intervention also includes the correct perception of the space sheet. In fact, a lack of ocular coordination impacts on the sheet space perception. For instance, the child often colours in the same point on the sheet. (Larocca & Sangalli, 2006)

*Colouring and hand movements control (3 different typologies)*

It has been noted that the pupil with dysgraphia has always a lack in colouring. The assessment of this ability is therefore an indicator of a possible presence of future dysgraphia. Thanks to colouring it is possible to evaluate the level of motor maturation of the hand. The observation allowed us to identify three types of colouring that represent the steps of the graphic gesture organization:

First type: check the sign at the edge of the figure.

Second type: independence in the control of the combined wrist control sign.

Third type: rotation and independence of the wrist with motility of the fingers. (Lascioli & Sangalli 2009)

*Wrist control*

A crucial motor element for the proper development of the handwriting is the wrist and its organization. A high grasp or rigid wrist is related to dysgraphia.

*Wrist pressure*

Hand pressure on the sheet appears to be a valid indicator of motor-related writing skills. The problem is when the child uses too much pressure (up to the tearing of the sheet) or when the pressure used is almost invisible.

*Fingers motility*

Handwriting is a fine-motion gesture. If there is dysgraphia the fingers are not sufficiently mature to carry out the required movements. The graphic gesture is slow and inaccurate, often made with wide movements of the hand that tries to compensate the lack of tactile motility.

*Orientation of the sign*

The correct sign orientation is one of the most important prerequisites to develop a good handwriting. The difficulties of space sheet perception bring to visual difficulties of specific symbols. The child who fails to reproduce the graphic sequences proposed maintaining the same orientation of the sign also manifests difficulties of spatiality (orientation in the leaf space), and letters overlapping. This is because the orientation of the letters becomes difficult when the child does not properly perceive the space on which he operates.

### 3. What possible educational interventions?

For each prerequisite, we present, different educational interventions that can be implemented where these are not present. Choosing the type of activity to be offered to the child, requires to assess handwriting prerequisites. It is in the evaluating phase that the teacher can determine, on a case-by-case basis, which type of intervention will be implemented. (Lascioli & Onder, 2006) Field experience has allowed us to verify that among the prerequisites there are neuro-genetic correlations, so the non-maturation of some prerequisites affects the acquisition of others. We have also noted that in the absence of interventions aimed at recovering the prerequisites, despite the efforts made by the child to compensate autonomously, generally he does not obtain the hoped results, for whom the handwriting is still deficient. The order we show below reflects our point of view about neuro-motor organization gesture in handwriting. (Lascioli & Sangalli 2009)

#### *Head and shoulder control*

In absence of such a prerequisite, it is advisable to propose to the child motor activities as walking, crocheting, vestibular and sensory stimulation games. (Sangalli, 2005)

#### *Stable sitting position*

The most appropriate posture for organizing the graphic gesture is the one in which the child is sitting in a chair that allows him to have feet well rested on the ground, slightly higher knees in the pelvis. The table should be placed at a height suitable for the arms, the elbow in a right angle to the table top. This posture appears to be functional to the purpose and can allow the child to stabilize the trunk, to use better the hands.

#### *Proper muscle tone*

In many cases, difficulties in handwriting are related to hypotonic problems. Recovery of muscle tone, therefore, appears necessary (especially to improve hand grasp). This can be done by offering the baby suspension games. In general, all motor-type exercises are useful to improve the muscular tone of shoulders and arms. These exercises are also useful to improve the performance in drawing, colouring, or writing.

#### *Hand (tactile sensitivity)*

Hands, as we know, are a fundamental tool of exploration and knowledge. However, in some children, using hands to explore (touch), may be problematic (this is evidenced in the presence of autism and other genetic syndromes). Helping your child to use hands to explore, touch, play, it is also essential to improve handwriting. This can be done, for example, through tactile boxes, with materials of different consistency, such as rice, flour, maize, grapefruit, stones, etc. Within these boxes you can hide very motivating objects for the child, for example: cars, games, plastic animals. Research and digging with hands, helps the child to improve the use of his hands, in particular tactile sensitivity. The stimulus given by lightweight material and heavy material allows the organization of good hand tactility. It is also very important to promote intelligent use of the hand. For example, teaching the child to find objects that can be placed inside a bag or box, without using the sight. Both these activities allow the child to obtain a superficial and deep level of touch, adapted to the correct perception of the graphic tool. Improving tactility, in fact, allows and facilitates the improvement of manual skills. (Sangalli, 2012)

#### *Visual convergence and accommodation*

In our observations we noted that some of the difficulties children encountered in colouring or drawing were clearly due to problems of visual convergence. It is obvious that if this function is absent, it is difficult for the child to look at the work table and generally at what the hand is doing, it is also difficult for the child to shift attention from what he is doing to what he is listening. The child has to be able to tell the difference between listening and performing actions. Our observations have allowed us to verify that stimulation of vestibular system (for example: rolling) improves the child's visual and auditory coordination and attention to the task. (Larocca & Sangalli 2010)

#### *Brain dominance*

According to our research and experience we are convinced that the development of brain dominance is very important in improving handwriting. It is undeniable that many children have problems of brain dominance. Among these handwriting problems are pressing. We have also verified that simple motor exercises (sliding, rolling, racing) improve the dominance. These motor activities, if continued in time for at least one month, allow to observe a progressive improvement in discriminatory capacity to use his contralateral part of the body.

#### *Coordinated walk*

Coordinated walking is an indicator that the child has reached an important stage in the development of neuro motor maturation. Generally, within three years of age children are able to walk and run in a coordinated way. It is during this phase that even the hand completes its motor maturation. Our field experience allowed us to verify that the proper use of hands occurs when during the gait arms are coordinated with legs.

#### *Correct hand grasp (figure 1)*



There is a correlation between dysgraphia and dysfunctional grasp. Generally, the best age to intervene - where necessary - is three years. There are very simple and non-invasive approaches to fit the right hand grasp. For example, for children who have hammer grasp or have a very rigid wrist, a wooden tablet can be used (figure 2). To encourage a proper thumb and index position, it can be used a cardboard holder (figure 3), or a sock with two holes (figure 4). These are simple solutions that allow you to improve hand grasp without much effort for children. Hand grasp can be improved even in children who can already write. It should be kept in mind, however, that the intervention should recover their motor memory. To be effective this technique should not be applied on writing, but on colouring.

*Hand-eye coordination*

Hand eye coordination is achieved by specific motor activities. (Sangalli, 2012)

*Colour tract (3 different typologies), wrist control, and fingers motility.*

The maturation of the movements needed for handwriting is described by three types of colouring. Figure 5 shows the first proposed colouring. It is a stencil with a black card. The child is invited to colour covering all the white spaces. This exercise allows him to mature his colouring control. The size of the image to be coloured must be very small at first, then gradually increase according to the ability reached by the child. Figure 6 shows the second proposed colouring. The child colours different images, one part at a time. It is the adult's task to outline the parts that must be coloured. Through this exercise the child improves his wrist control, so the wrist begins to be more mobilized. In Figure 7 we see the last type of colour proposal called 'Tetris'. By this latter proposal handwriting learning is actually possible. This level of colouring allows maturation of all neuronal areas of anatomical parts of arms and hands. This is also true for left-handed children.

*Sheet space organization and colouring*

Some pre-graphic exercises are presented in the following pictures. The child is able to learn how spatially organize the mark in a square, in a line and in a sheet. These exercises are the basis for the development of letter-writing. (Figure 8). (Lascioli & Saccomanni, 2009).

Figure 1. Example of bad hand grasp.

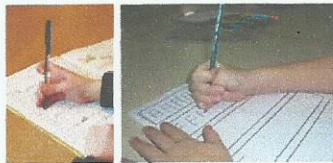


Figure 2. For children who have hammer grasp.



Figure 3. Cardboard holder.



Figure 4. Sock with two holes.



Figure 5. Stencil with a black card.



Figure 6. Second proposed colouring.

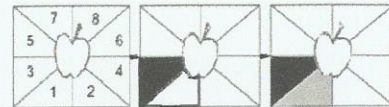


Figure 7. Colour 'Tetris'.



Figure 8. Development of letter-writing.

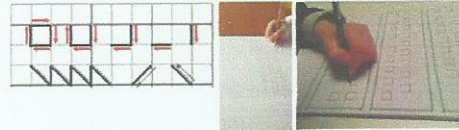
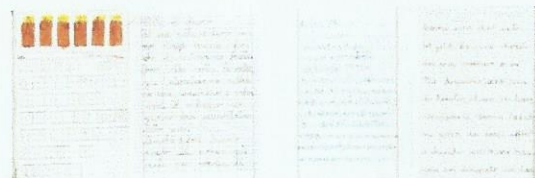


Figure 9 and 10. Before and after the treatment.



**4. Conclusions**

The results obtained by evaluating these indicators and intervening on a preventive level have allowed to decrease many cases of dysgraphia. Let's briefly list some of the pictures we have collected

before and after the above-mentioned interventions. Over the years, we have proposed this evaluation and these educational interventions in children's schools with the aim of preventing dysgraphia. Currently, data are being analysed for a research conducted on 100 primary school pupils who have done this work in the nursery school. It is our intention now to check whether preventive action is in fact able to counter the onset of dysgraphia disorder. (Lascioli, 2016)

### References

- Sangalli, A. L. (2011). L'arte perduta della manualità. [The lost art of manual skill]. *La Clessidra*, n. 21, anno 8°, 13-14.
- Sangalli, A.L. (Eds.). (2012). L'attività motoria compensativa. [Compensatory motory activity]. Trento, Italy: Trento Unoedizioni (Original work published 2003)
- Larocca, F., Sangalli, A.L. (2010). *Anch'io so leggere. Risultati di una ricerca per insegnare a leggere a bambini con disabilità intellettiva* [I can read too. Results of a Research to teach Children with Disabilities how to read], (pp. 265-370), in Larocca F. (Eds.), *Pedagogia generale con elementi di didattica generale e speciale*, Verona, Italy: Quiedit.
- Lascioli, A., Sangalli, A.L. (2009). *Il lavoro educativo con il bambino con sindrome genetica*. [The educative work with genetic syndrome child], (pp. 103- 122), in Lascioli, A., Saccomani, R. (Eds.). *Una introduzione all'educazione speciale, manuale per insegnanti si sostegno delle scuole dell'infanzia*, Milano, Italy: Raffaello Cortina.
- Sangalli, A.L. (2009). I pre-requisiti per l'apprendimento dell'aritmetica. [The prerequisites to learn Arithmetic]. In *Il bambino mente matematica* (pag. 61-74), Associazione Montessori di Verona, Accademia di Agricoltura Scienze e Lettere di Verona, Verona, Italy.
- Larocca, F., Sangalli, A.L. (2006). I can read too. Results of a Research to teach Children with Disabilities how to read. In *Proceedings of the Symposium on special pedagogy, state of the art in practical work, research and education*. A. Lascioli, M. Onder, (Eds.). (pp. 293-302), Verona, Italy: Libreria Editrice Universitaria
- Larocca, F. Sangalli, A.L. (Eds.). (2005). *Anch'io so leggere. Risultati di una ricerca per insegnare a leggere a bambini con disabilità intellettiva*. [I can read too. Results of a Research to teach Children with Disabilities how to read] Milano, Italy: GlaxoSmithKline.
- Sangalli, A. L. (2005) Planning Special Education Actions When Teaching To Read And To Write For Children With Genetic Syndrome: The Logic-Dispositional Maps. In *ISEC 2005 Conference Proceedings CD Inclusive Technology Ltd, Gatehead Business Park, Delph New Road, vDelph. Oldham . OL3 5BX, UK*
- Lascioli, A. (2014). Verso l'Inclusive Education. [Towards Inclusive Education]. In Goussot, A., Vigilante, A. *Pedagogie attive* (pp. 102). Foggia, Italy.
- Lascioli, A. (Eds.). (2011). *Educazione speciale. Dalla teoria all'azione*. [Special Education. From theory to action]. Milano, Italy: Franco Angeli.
- Lascioli, A. (Eds.). (2011). *Handicap e Pregiudizio. Le radici culturali*. [Handicap and Pregiudice. The cultural basis]. Milano, Italy: FrancoAngeli.
- Lascioli, A., Saccomani R. (Ed.) (2009). *Una introduzione all'educazione speciale. Manuale per insegnanti di sostegno delle Scuole dell'infanzia*. [An introduction to Special Education. Manual for nursery schools teaching assistant]. Milano, Italy: Raffaello Cortina Editore.
- Lascioli, A. (2008) *Educazione Speciale*. [Special Education]. Verona, Italy: Libreria Editrice Universitaria
- Lascioli, A., Onder, M. (Ed.) (2006). *Proceedings of the Symposium on Special Pedagogy*. Verona, Italy: Libreria Editrice Universitaria
- Lascioli, A. (Ed.) (2001). *Elementi introduttivi alla Pedagogia Speciale*. [Introductive elements to Special Pedagogy]. Verona, Italy: Libreria Editrice Universitaria
- Lascioli, A. (2016) Glenn Doman e Carl H. Delacato. Educazione speciale e cervello: la straordinaria impresa di due pionieri della 'plasticità neuronale. [Special Education and the brain: the extraordinary enterprise of two pioneers of "Neural Plasticity"]. In Crispiani, P. *La pedagogia speciale e la sua storia. L'origine, lo sviluppo, la differenziazione*. Pisa, Italy: Edizioni ETS.
- Lascioli, A. (Ed.) (2007). La Pedagogia speciale in Europa: problematiche e stato della ricerca. [Special Pedagogy in Europe: pedagogics issues and research]. Milano, Italy: Franco Angeli.
- Lascioli, A. (2013). *Teachers' Skills in the Inclusive School System*. Anno XIII, N. 12, ([www.educare.it](http://www.educare.it))
- Lascioli, A., Onder, M. (2010) The integration: the Italian way. From integration to inclusion: a European perspective. *Education Sciences - Inclusive Policies and Contemporary Special Education: Theoretical Issues and Empirical Studies*. n. 3/2010, 39-49.
- Overvelde, A., Hulstijn, (2011). W. Handwriting development in grade 2 and grade 3 primary school children with normal, at risk, or dysgraphic characteristics, *Reserch in Developmental Disabilities*, Vol 32, Issue 2.