Teaching Writing in the context of Learning disabilities

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La lettoscrittura è un'attività cognitiva piuttosto recente nella storia dell'uomo. Partendo da tale assunto, quando si tratta di insegnare ad alunni con Disturbi Specifici di apprendimento, la scelta del metodo di lettoscrittura costituisce un elemento prioritario. Data la natura specifica delle difficoltà, la metodologia utilizzata nella didattica non costituisce affatto una variabile neutra. Il presente articolo intende porre l'attenzione alle attuali metodologie di insegnamento-apprendimento della lettoscrittura, lamentando eccessiva attenzione agli aspetti in gioco nell'insegnamentoapprendimento della lettura, a detrimento di quelli che riguardano le capacità prattognosiche investite nell'attività di scrittura. Una riflessione più puntuale anche sugli aspetti della didattica della scrittura apporterebbe notevoli benefici agli alunni con difficoltà specifiche di letto-scrittura, oltre che a tutti gli alunni in generale.

Read-write is a cognitive activity which, from the historical perspective, is quite a recent development in humans. Based on the above, when there is a learner with Learning Disabilities in a class, the choice of the read-write teaching approach is one of the first things that needs to be done in a learning context. Given the specific nature of the difficulty, the teaching methodolgy adopted is not a neutral variable. This paper wants to focus the attention on current teaching practices, and criticise the excessive focus on aspects associated with the teaching of reading, to the detriment of those practognosic skills which are partand-parcel of writing activities. Closer reflection on the aspects related to the teaching of writing would be of great benifit to Special Needs learners, as well as to learners in general.

Parole chiave: DSA (disturbi specifici di apprendimento), didattica, letto-scrittura. Key words: learning disabilities, teaching, read-write.

FOREWORD: LEARNING DISABILITIES AND THE SCHOOL

Learners with Specific Learning Needs (SLNs) have specific difficulties in decodifying the written codex. We are used to observing that the majority of learners learn to read and write in the space of a few months, sometimes even in weeks. However, at the same time, we ignore the fact that this happens in phonologically transparent language systems, such as Italian and Spanish, or, more generally, that reading and writing are complex competences which pre-suppose the maturation of specific requisites at a neuropsychological and motory level¹⁰². Moreover, they also involve a series/plurality of bodily functions. Learning to write is a well codified task which envisages quite fixed stages.

The study of the different stages involved in learning to read has been the subject of much research which explains how children move from not knowing

¹⁰² P.H. SEYMOUR, M. ARO, J.M. ERSKINE, *Foundation literacy acquisition in European orthographies*, in «British Journal of Psychology», 94, 2003, 143-174.

anything about the relationship between the oral and the written forms of language to the autonomisation of reading processes¹⁰³.

Read-write is a cognitive activity which, from the historical perspective, is quite a recent development in humans. Many scholars believe that our human genome and cerebral structures did not have the time needed to modify and develop cerebral circuits that were suitable to receive linguistic information through the organs of sight¹⁰⁴.

Dehaene is of the opinion that a sort of "neuronal recycling" took place in our brain; that is to say there was a reconversion of a previous type of function into a new function which was more useful to the cultural context which had witnessed the decline in the oral tradition. The neurons which once served facial recognition and that of other objects underwent change so as to be able to recognise and decode the letters of the alphabet.

This implies that it was not that our cerebral cortex evolved, but that some neurons simply "recycled" themselves for the purpose of reading, while at the same time writing systems were perfected so as to produce the alphabet system, which our brain could easily learn. Thus, the cultural representations which stimulate man are many, but it is the brain that selects only those that that have within its internal structure the possibility of being an efficient "neuronal recycling" agent¹⁰⁵.

Based on the above, when there is a learner with Special Needs in a class, the choice of the read-write teaching approach is one of the first things that needs to be done in a learning context. Given the specific nature of the difficulty, the teaching methodology adopted is not a neutral variable.

This paper wants to focus the attention on current teaching practices, and criticise the excessive focus on aspects associated with the teaching of reading, to the detriment of those practognosic skills which are part-and-parcel of writing activities. Closer reflection on the aspects related to the teaching of writing would be of great benefit to Special Needs learners, as well as to learners in general¹⁰⁶.

¹⁰³ Cfr. J. ALEGRIA, *Premiers pas dans l'acquisition de la lecture*, in R. Salbreux (a cura di), *Lire, écrire et compter aujourd'hui*, ESF, Paris 1995; I.C. EHRI, *Learning to read and spell words*, in «Journal of Reading Behaviour», 19, 1987, 5-31; E. FERREIRO, A. TEBEROSKY, *La costruzione della lingua scritta nel bambino*, Giunti-Barbera, Firenze 1985; U. FRITH, *Beneath the surface of developmental dyslexia*, in K.E. PATTERSON, J.C. MARSHALL, M. Coltheart, *Surface Dyslexia*, Routledge & Kegan, London, 1985, 301-330; L. TRISCIUZZI, "Percezione dello spazio e apprendimento della scrittura", in *Cibernetica e apprendimento*, Lisciani e Giunti, Teramo 1974; C. ZUCCHERMAGLIO, *Gli apprendisti della lingua scritta*, Il Mulino, Bologna 1991.

 ¹⁰⁴ M. WOLF, Proust e il calamaro. Storia e scienza del cervello che legge, Vita e Pensiero, Milano 2009.
¹⁰⁵ S. DEHAENE, I neuroni della lettura, Raffaello Cortina, Milano 2009.

¹⁰⁶ T. ZAPPATERRA, La lettura non è un ostacolo. Scuola e DSA, Edizioni ETS, Pisa 2012.

2. THE GREAT FORGOTTEN ONE: THE TEACHING OF WRITING

Since the Unification of Italy until the present there has been a progressive and unending decrease in interest in relation to the teaching of writing, so much so that the latter can now be referred to as "the forgotten one". Attention has been focused more and more on linguistic and contents aspects related to the written form of language, despite the fact that writing, together with and side by side with reading, constitutes a basic part of learning.

Originally, the Ministry programmes recognised both the instrumental and aesthetical uses of writing. The teacher had to teach the correct posture of both the person and the hand, how to hold the pen and paper, and, at the same time, explain the meaning of terms such as 'slope', 'inclination' and 'stem'. The learner had to take up the correct position and assure himself, with the movement of his fingers, that his hand could support the 'slope'. Precise movements related to the writing of the letters were to be executed using the pen both for the initial and final parts of the drawing of the outline of the letter¹⁰⁷. Then the pen was replaced by the biro, and the exact precision and refined graphics associated with good handwriting. Certainly, in the past the emphasis was too much on the technical aspect, nonetheless it would be useful for teachers to learn about the teaching of handwriting for the benefit of all learners (and not only those with visual-perceptive, motor deficits, or those with special needs)¹⁰⁸.

In Italy, the current practice of teaching writing places the emphasis on the task of reading. Greatest attention is focused on grapheme-phoneme recognition, on perceptual and visual aspects which allow discrimination among and between letters, and on the ability to divide into syllables which in turn facilitates the reconstruction of the different elements which make up the word. Thus, teaching focuses on the linguistic (phonological, alphabetical, orthographic and lexical) aspects of writing with little attention given to the *execution parameters* which are considered to be secondary¹⁰⁹.

Instead, the learner needs to be accompanied in this task which is something new for him and which involves not only the mind but the whole body. He adopts functional posture and pen(cil)-hold, executes fine-tuned motor movements which follow precise directions. Posture, hold, gestural manner and direction affect the good result of the writing product; all the more reason why it is necessary for the teacher to introduce the learner to them. Indeed, as Venturelli

¹⁰⁷ La Guida del maestro elementare italiano. Giornale didattico esplicativo delle materie d'insegnamento prescritte dai programmi governativi per le 4 classi elementari, Tipografia S. Marino, Torino, 1868.

¹⁰⁸ C. PIANTONI, *Omaggio della bella calligrafia*, in «Fare Scuola/6. La scrittura. Quaderni di cultura didattica diretti da F. Frabboni, R.Maragliano, B.Vertecchi»,1987, 16-17.

¹⁰⁹ A.VENTURELLI, Scrivere: l'abilità dimenticata. Una prospettiva pedagogica sulla disgrafia, Mursia, Milano 2011.

points out, the learner has to solve a series of problems related to motor aspects as well as to aspects related to the execution of each letter or traceline. These elements cannot be taken for granted. Therefore the teacher must verbalise and dwell on phases which enable the learner to trace a letter or a word, and provide precise execution instructions rather than simply present a model to copy and then move directly on to the analysis of the learner's writing production, because movement, posture and pen-hold are at the basis of the realization of a good writing product¹¹⁰.

Alphabet cards and shapes and learning-support materials frequently propose the four written letter forms (capital and small print, small and capital script) together. This requires the learner to recognise the phoneme which corresponds to the four graphemes. Such an approach does not take into consideration the fact that by presenting a single sound with its four different written forms during the learning phase can confuse learners who have motor and perceptive difficulties, as well as constitute a learning obstacle for dysgraphic, dyslexic, and dysorthographic learners. It would be useful to start with print capitals because it is the easiest letter from a perception point of view, and later, when this has been welllearned, move on to script and then to cursive.

The choice of block letters or print arises from the fact that it is much easier to draw/trace/write the letter and read it. Thus, it is possible to tackle the initial tasks of grapheme-phoneme conversation, traceline direction (from the top to the bottom and from left to right), alignment and width. Furthermore, by presenting the letters separately, the process of phonemic analysis is made easier. This approach is suggested, not only for learners with problems of perception or special needs, but also for learners with intellectual deficits or neurological disturbances which impede the execution of small circular hand movements as required when using script or cursive.

Later on, when the learner has conceptualized the learning of writing, the move from capital print to small print comes about without difficulty. The use of small print as an intermediate stage between script and cursive has a didactic basis. The distinction or differentiation between cursive and print emerges when, wanting to write the print form in a hurry, at a certain point one does not want to raise the pen from the paper after every letter and so begins to link the final part of each letter with a fine traceline to the following letter, while trying at the same time to the hand and pen movements as continuous a flow as possible. It is precisely by making this need explicit that one can lead the learner to "deduce" the cursive form which is not yet in his possession, from the small print form which he knows¹¹¹.

¹¹⁰ A. VENTURELLI, op. cit., 2011.

¹¹¹ L.TRISCIUZZI, T. ZAPPATERRA, *La dislessia. Una didattica speciale per le difficoltà nella lettura*, Guerini e Associati, Milano 2005.

Writing is a morphokinetic movement in so far as it is the external projection of a cerebral representation. The muscles involved in the act of writing execute movements which are simply the duplication of an internal image. This representation is principally of a visual nature and is constructed during the learning process in the cerebral structures in close connection to the sense systems. A letter must first be visually perceived and analysed in all its components i.e., shape and spatial arrangement. Thus, a neurological databank of letters and words is created in the brain and these are called up at the moment of read-write¹¹².

Writing is linked in a special way not only to visual memory, but also to motor memory; it is realized solely on the basis of remembering the graphic code and also the movement which is necessary for its execution. Thus, writing *prassia* becomes *prattognosia*, i.e., knowledge on the part of the learner of the specific motor activities needed to "compose" each single letter. It is obvious that *prassia* becomes *prattognosia* only when the graphic act has been mastered¹¹³.

An extended neuron network is formed when the child learns to read and write simultaneously. With reference to the motor-related aspects of writing, these circuits develop in the cerebellum which is where motor memory is located. Through repeated and graded exercises there is a gradual move from a retro-actively controlled movement to one which is controlled before the gesture takes place, thus enabling a gradual decrease in the amount of mistakes made¹¹⁴.

3. THE METHODOLOGICAL CHOICE TO STEM DIFFICULTIES IN SPECIAL NEEDS LEARNERS

Capital print is a graphic alphabetical character which the learner can see on several occasions. Moreover, it permits the decomposition of the words into single letters, in the same way as words are broken down into single sounds. This writing presents the topological properties which facilitate recognition better than others. In point of fact, a capital «P» or a small «p» (with a long or short rod, with a narrow or wide eye) are the same in so far as they are partially closed and partially open figures, and they are different to an «o» which is always closed, to an «n» which is always open or to an «i» which has a characteristic segment which is separated by a space and a dot. An "a" (be it print or cursive) always appears as a closed figure and remains such even if some people write it in a rounded manner and others as a spheroidal shape. A "b" (when

¹¹² Cfr. S. DEHAENE, op. cit.; A VENTURELLI, op. cit., 2011.

¹¹³ L.TRISCIUZZI, Manuale di didattica per l'handicap, Laterza, Roma-Bari 2002².

¹¹⁴ A.VENTURELLI, Il corsivo: una scrittura per la vita. Prevenzione e recupero della disgrafia, Mursia, Milano 2009.

referring to the cursive character) can always be recognised even if it is written with a narrow or wide eye¹¹⁵.

It is important for learners to have a minimum of frustration as possible during the learning process. This is because the greater sense of trust that he develops in relation to himself and to school is the best way to obtain good results. This can be achieved by structuring notions and exercises that the learner needs to learn in the most congenial form i.e., typological form. In this manner, the learner can, only to a small extent, consider the dimensions, spacing and proportion of letters.

It would also be useful if the first signs that the learner needs to learn were executed in a broad space, such as a large page, or better, on a blackboard so that the breadth of the movement allows him greater control and a greater possibility to correct point by point. Once the learner has mastered the topological properties of writing, it is easier to help him write smaller and better respect the proportions¹¹⁶.

As regards the methodological teaching-learning choice related to read-write, in the history of didactics this topic has been widely treated. It is important to highlight how today there is a sort of Messianic vision/view of the so-called perfect method. The learning of read-write is something which begins long before schooling begins¹¹⁷.

Even if the phonological approach seems, at present, to be the best or the most effective, two different comments can be made: basically it is not *per se* a method, but rather the way to use it. How is it practiced? What is the pedagogical ambience in which it occurs? Within what context? Moreover, is it possible to activate a compensatory approach to possible difficulties in socio-family and cultural contexts before or at the moment of adopting an approach to reading?¹¹⁸.

In kindergarten there are numerous occasions in which children can avail of experiences related to the elaboration of alphabetic and numeric stimuli and thier related meaning. Such experiences constitute a specific training objective. Children are asked to carry out research tasks/exercises and anticipate meaning associated with what is written on different learning-support materials (boxes, notices, menus). Ludic and refection activities are undertaken in relation to the spoken language (reading and rhyme invention, transformation and word segmentation, reflections on word length).

¹¹⁵ L.TRISCIUZZI, T. ZAPPATERRA, *Dislessia, disgrafia e didattica inclusiva*, in G. SIMONESCHI (a cura di), *Dislessia e Disturbi Specifici di Apprendimento. Teoria e prassi in una prospettiva inclusiva*, «Annali della Pubblica Istruzione», 2, 2010a, 51-76.

¹¹⁶ L. TRISCIUZZI , C. FRATINI , M.A. GALANTI , *Manuale di pedagogia speciale*, Laterza, Roma-Bari 1996.

¹¹⁷ C. PASCOLETTI, Imparare a scrivere. Vol. 2. L'apprendimento, le disgrafie, il curricolo Smith, Vannini, Brescia 2005b.

¹¹⁸ A. MUCCHIELLI-BOURCIER, La prévention de la dyslexie à l'école, l'Harmattan, Paris 2004.

All of these activities permit the child to consider language in its sound and abstract aspects, thus later acting as a prerequisite for the learning of read-write activities. These constitute didactic objectives which can increase the communication skills and abilities of the child both from a semantic viewpoint and a written code aspect, before the process of literacy really gets underway¹¹⁹.

Raising the level of linguistic and metalinguistics competences of the child means, as we have seen, working on the pre-requisites of read-write learning. Side by side with these, in kindergarten attention also needs to be focused at a psychomotor level, on fine-tuned motor activity which leads to writing *prassia* and, later, to *prattognosia*, with experiences of a discriminatory and graphic-motor nature which aim to increase and consolidate the basic fine-tuned motor, visual-perceptive and visual-motor skills and abilities¹²⁰.

Scholars agree that the global method is not suitable for special needs learners¹²¹. This is the Decroly method, which, by working with learners with difficulties, endorsed a read-write teaching methodology in which the whole word is presented as a form *per se* and requires an affective action which is spurred by something which has its own significance in the child's brain. The theoretical precepts underlying the global method are to be found in the motivation of the child to learn how to write. Those in favour of this method hold that the letter or syllable cannot motivate the child to learn to read in so far as they have no referent with which to associate these, as instead happens with the word which always has an image of a mental representation. Thus, an association is created between the word as a graphic sign, the word as it is pronounced and aurally perceived and the articulation of the sound itself. Such a phenomenon becomes a motivated event thanks to the meaning that the words evoke¹²².

The global method is not suitable for dyslexic learners due to their difficulty in analysing language which is related to the signs, sounds, and forms.

Without explicit learning of the grapheme-phoneme correspondences, the global method is not enough to enable learners to uncover the regularities of a language since, even after having been exposed to thousands of written words, even an adult who has not had formal and explicit training in the written form of

¹¹⁹ C. PONTECORVO, Manuale di psicologie dell'educazione, Il Mulino, Bologna, 1999.

¹²⁰ K. BEERY, N. A. BUKTENICA, Developmental test of visual-motor integration, Fottlep, Chicago 1967; O. BRUNET, I. LÉZINE, Le development psychologique de la première enfance, Presse Universitaire de France, Paris 1951; M. COLTHEART ET AL, DRC: a dual route cascaded model of visual word recognition and reading aloud, in «Psychological Review», 108 (1), 2001, 204-256.

¹²¹ Cfr. MIUR, *Linee guida per il diiritto allo studio degli alunni e degli studenti con Disturbi Specifici di* Apprendimento, parte integrante del Decreto 5669, attuativo della Legge 170/2010 "Nuove norme in materia di Disturbi Specifici di Apprendimento in ambito scolastico.

¹²² O. DECROLY, La funzione di globalizzazione e l'insegnamento, La Nuova Italia, Firenze 1953.

language cannot easily understand that all those words are made up of a regular sign system¹²³.

Furthermore, the global method does not allow procedure generalizations in the reading of new words. This generalization process is extremely important not only for the learning of reading on the part of the child, but also in relation to his self-sufficiency.

This is an important point because it refutes one of the arguments in favour of the theoretical bases of the method, i.e., that the global method increases the child's freedom and sense of self-sufficiency. On the contrary, it is in point of fact the explicit learning of the grapheme-phoneme correspondences which empowers reading in the child, and it is only the analytical method which provides access to new words¹²⁴.

Research in schools has demonstrated how inadequate the global method is. Independently of their social extraction, learners exposed to methods which did not focus on codifying graphemes show a delay in reading ability which is ongoing, even if subsequently it might disappear. In point of fact, learners taught with the global method are less proficient in reading new words, but also less quick and less efficient in text comprehension. It is nonetheless true that the global method is not frequently used.

The majority f types used is the semi-global ne. Whatever method is analytical, i.e., favours the analysis effort facilitates the task of the dyslexic learner. This notwithstanding, it is worthwhile presenting briefly the global approach. For example, a word proposed globally is captivating because it brings meaning, but what is important is the effort related to the decomposition- recomposition of the word¹²⁵.

Freinet's method is based on the same premise, which moves from learner interest and motivation, which the author uses to 'graft' a new technical innovation of the read-write learning process, the use of typographical characters and of print in the school. Given the task of producing the school journal, according to Freinet, while composing the text to print the learner necessarily focuses attention on the word, analysing it in its constituent elements, i.e., in the single letters and in the spatial relations between one letter and another. Likewise, the child is motivated to learn the division into syllables so as to learn how to go to back to the beginning and thus learns with motivation and not artificially punctuation, capitals and spacing between words¹²⁶.

¹²³ K. RAYNER ET AL., How psychological science informs the teaching of reading, in «Psychological Science», 2 (2 Suppl), 2001, 31-74.

¹²⁴ S. DEHAENE, op. cit.

¹²⁵ A. MUCCHIELLI-BOURCIER, op. cit.

¹²⁶ Cfr. C. FREINET, *Le mie tecniche*, La Nuova Italia, Firenze 1969; C. FREINET (1968), *L'apprendimento della lingua secondo il metodo naturale*, La Nuova Italia, Firenze 1971.

Dottrens makes a further contribution to the debate with a reflection on the teaching of the art of writing which holds the capital print form as the most suitable since it is easily understood and is closest to the experiential world of children who are thus motivated to write because this is the character that they are used to seeing in advertisements and labels.

Moreover, the choice of print capitals for the author goes back to Piaget's principle based on which the child is not able perceptively to grasp and so reproduce geometrical shapes respecting the Eucidean types of spatial relations, before the age of six-seven years, when the development stage of concrete operations begins.

Thus, it is quite difficult for a child of that age to be able to grasp the complex shapes of the act of cursive writing. The author suggests focusing attention on how the child reproduces each single letter, on the relationship which exists between the different parts of letters which respect the Euclidian rules, rather than emphasize the size of letters. An example of good writing must be placed correctly on the line, be rounded and well-distributed in the sense that the space between the letters and between one word and the following one must be welldistributed¹²⁷.

Thus, the debate examines the analytical-synthetic method. The latter can be divided into three phases. The first consists of the teaching-learning of the skill of tracing bars and lines, i.e., the segments which constitute letters: bars, bends, circles, and points. Secondly, the composition of letters is taught and reproduction is learned. Lastly, in the third phase the learner learns syllabic forms, words and phrases. This method does not envisage preparatory functional exercises for the harmonic execution of coordinated oculo-motor movements in so far as it is presumed that the latter derive from the forms of writing which should be presented, on the basis of their difficulty, to the learner. One of the criticisms against the method is related to the abstract solicitation addressed to the child for which a letter or a syllable does not correspond to the metal image. Maria Montessori replied to this criticism with a corrective action: having examined the movements of the learner during the act of writing, she proposed the method based on preparatory writing exercises which consisted in the manipulation of large letters, expressed in relief using different materials.

The continuous stroke and the manipulation on the part of the child used to constitute the preparatory writing exercises from the viewpoint of fine tuned motor activity¹²⁸.

¹²⁷ Cfr. R. DOTTRENS *ET AL.*, *Nuove lezioni di didattica*, Armando, Roma 1974; R. DOTTRENS, *Pe-dagogia sperimentale e sperimentazione*, Armando, Roma 1991.

¹²⁸ M. MONTESSORI, Il metodo della pedagogia scientifica applicato all'educazione infantile nelle case dei bambini, Bretschneider, Roma 1909.

From these exercises the learner had begun a full preparation of all the movements necessary for the act of writing. The analytical-synthetic method does not envisage specific preparatory exercises which can contribute to the creation of an independence between forearm and hand muscles. Instead, she proposes, as functional to that objective, all the previous graphic exercises to the act of letter writing¹²⁹. in the analytical-synthetic method, the child learns those elements which he needs to produce the letters, points, bars, curves and circles. Great importance is given to the care with which the single letters are developed, as well as to the relationship between letters. Learning progression is presented as being slow and progressive, and the child with perception and spatial orientation difficulties can enrich his perception of space. The limit of this method was that it did not give sufficient attention to the prattognosia aspect of writing, i.e., a preliminary education which involved the required movements associated with the act of writing was not envisaged. To this end, Maria Montessori intervened by drawing attention to the motor aspect of learning writing, thus providing the basis for a didactics of gesture¹³⁰.

Currently, the phonologiccal method is, correctly, considered by researchers to be the best approach, given the string link between metaphonological abilities and the acquisition of reading skills. Morais recommends it given the graphemephoneme correspondences as well as for the phonetic-analysis ability which it can develop¹³¹. In the phonological method, reading precedes writing and both activities occur as a result of the analyses and syntheses of words. The learner approaches read-write activities thanks to the cards which offer a coloured-image of an object known to children, beneath which the word associated with the name of the object is written in small capitals.

The word is then read on the basis of the association with the image contained in the card. In addition to the cards, mural alphabet cards are proposed which are needed for group didactic activities so that the teacher can generalize the knowledge of eacg grapheme-phoneme which each learner needs to acquire seperately. Following an initial grapheme-copying phase, one moves the to the dictation phase¹³².

The phonological method which derives from the analytical – synthetic method seems to move forward simultaneously and consolidate text comprehension. This approach undermines the accusations levelled in relation to the grapho-phonological methods of transforming children into 'little parrots' who pay no attention to meaning. In truth, decoding and comprehension go hand-in-hand: those children who know better how to read words and isolated pseudo-

¹²⁹ C. PASCOLETTI, op. cit., 2005b.

¹³⁰ M.MONTESSORI, Manuale di pedagogia scientifica, Alberto Morano, Napoli 1935.

¹³¹ J. MORAIS, L'art de lire, Odile Jacob, Paris 1994.

¹³² C. PASCOLETTI, op. cit., 2005b.

words are also those who better understand the content of a phrase or text. It is obvious that learning to babble the words should not be an end in itself. Nowa-days, the majority of school texts, rely on short texts with meaning¹³³.

Teachers need to focus attention on the fact that learning to read constitutes the move from a visual unit to an auditory one. In kindergarten, many activities place learners in contact with the phonological reality of words, through the manipulation of sounds used in ludic activities aimed at sound recognition in relation to sounds and rhyme.

In the pre-school phase, the learner can also express letter shapes their traceline, however distinction and memorisation are exempt from pre-school learning objectives. This explicit and formal teaching/learning takes place at the beginning of pre-school, where the learner must know where every letter has its own precise shape. Letters are then introduced in a logical order.

Learning the art of writing is wearisome for all learners, but it presents different difficulties from one country to another, and from language to language. The difference lies in the orthographic transparency of the language system. Italian or Finnish children can read any word in their language in a short space of time, given the regular nature which upholds the grapheme-phoneme correspondence in these languages.

Didactic activity in Italian does not involve long dictations and spelling exercises, on the contrary English, French, or Danish children only achieve efficient reading skills and competences after many years. A 9-year old French child does not read as well as a 7-year old Spanish child, while an English child needs a further two years of training to reach the reading competence level of a French child¹³⁴.

In conclusion, we wish to underline the recognised importance of the use of teaching methods which take on a definite inevitability in difficult learning contexts. The choice of these methods is linked to a pedagogical reflection which takes into account both the individual/specific learning needs, and the need to enact a didactic practise which is open to the contextual and inclusive variables of all learners.

¹³³ S. DEHAENE, op. cit.

¹³⁴ P.H. SEYMOUR, M. ARO, J.M. ERSKINE, op. cit., 143-174; T.G. SCALISI, A. BOSCO, L. ROMA-NO, *Difficoltà di apprendimento della lingua scritta. Problemi metodologici nella validazione di prove predittive*, in «Life Span and Disability», 1, 2003, 87-120.

References

- ALEGRIA J., Premiers pas dans l'acquisition de la lecture, in Salbreux R. (a cura di), Lire, écrire et compter aujourd'hui, ESF, Paris 1995.
- BEERY K., BUKTENICA N. A., Developmental test of visual-motor integration, Fottlep, Chicago 1967.
- BETTELHEIM B., ZELAN K., Imparare a leggere, Feltrinelli, Milano 1982.
- BIAGIOLI R., ZAPPATERRA T., (a cura di), La scuola primaria. Soggetti, contesti, metodologie e didattiche, Edizioni ETS, Pisa 2010.
- BRUNET O., LEZINE I., Le developement psychologique de la première enfance, Presse Universitaire de France, Paris 1951.
- CARNEVALE S., LEGGIERO G. G., Disgrafia. Diagnosi e riabilitazione, Magi, Roma 2009.
- COLTHEART M. ET AL., DRC: a dual route cascaded model of visual word recognition and reading aloud, in «Psychological Review», 108 (1), 2001, 204-256.
- CORNOLDI C., Le difficoltà di apprendimento a scuola, Il Mulino, Bologna, 1999.
- CRISPIANI P., Dislessia come disprassia sequenziale, Junior, Bergamo 2011.
- CRISPIANI P. CAPPARUCCI M. L., La lettoscrittura. Dislessia-disgrafia. Azione 8, Junior, Bergamo 2007.
- CURATOLA A., Disabilità e scuola. Fondamenti, modalità e strategie di azione didattica, Anicia, Roma 2003.
- D'ALONZO L., Come fare per gestire la classe nella pratica didattica, Giunti, Firenze 2012.
- DECROLY O., La funzione di globalizzazione e l'insegnamento, La Nuova Italia, Firenze 1953.
- DEFIOR S., TUDELA P., Effect of phonological training on reading and writing acquisition, in «Reading and Writing. An Interdisciplinary Journal», 6, 1994, 299-320.
- DEHAENE S., I neuroni della lettura, Raffaello Cortina, Milano 2009.
- DOTTRENS R., Pedagogia sperimentale e sperimentazione, Armando, Roma 1991.
- DOTTRENS R. ET AL., Nuove lezioni di didattica, Armando, Roma 1974.
- EHRI I. C., *Learning to read and spell words*, in «Journal of Reading Behaviour», 19, 1987, 5-31.
- FACOETTI A. ET AL., The role of visuospatial attention in developmental dyslexia: Evidence from a rehabilitation study, in «Cognitive Brain Research», 15, 2003, 154–164.
- FERREIRO E. TEBEROSKY A., *La costruzione della lingua scritta nel bambino*, Giunti-Barbera, Firenze 1985.
- FRITH U., Beneath the surface of developmental dyslexia, in PATTERSON K.E., MAR-SHALL J.C., Coltheart M., Surface Dyslexia, Routledge & Kegan, London, 1985, 301-330.
- FREINET C., Le mie tecniche, La Nuova Italia, Firenze 1969.
- FREINET C. (1968), L'apprendimento della lingua secondo il metodo naturale, La Nuova Italia, Firenze 1971.

- GERARD C.-L., *Cliniques des troubles des apprentissages. De l'évaluation neuropsychologique à la programmation éducative*, De Boeck, Bruxelles 2011.
- FREINET C. (1971), L'apprendimento della scrittura, Editori Riuniti, Roma 1978.
- HAMSTRA-BLETZ L., BLOTE A.W., A longitudinal Study on Dysgraphic Handwriting in PrimarySchool, «Journal of Learning Disabilities», 26, 1993, 26 (10), 689-699.
- IOZZINO R., CAMPI S., PAOLUCCI POLIDORI C., Validità predittiva per la diagnosi di difficoltà di lettura e scrittura in prima elementare del livello di consapevolezza fonemica rilevato nel corso dell'ultimo anno di scuola materna, in «I care», 2004.
- La Guida del maestro elementare italiano. Giornale didattico esplicativo delle materie d'insegnamento prescritte dai programmi governativi per le 4 classi elementari, Tipografia S. Marino, Torino, 1868.
- MIUR, Linee guida per il diiritto allo studio degli alunni e degli studenti con Disturbi Specifici di Apprendimento, parte integrante del Decreto 5669, attuativo della Legge 170/2010 "Nuove norme in materia di Disturbi Specifici di Apprendimento in ambito scolastico.
- MEAZZINI P., La lettura negata ovvero la dislessia e i suoi miti. Guida al trattamento degli errori e delle difficoltà di lettura in cattivi lettori, Franco Angeli, Milano 2002.
- MONTESSORI M., Il metodo della pedagogia scientifica applicato all'educazione infantile nelle case dei bambini, Bretschneider, Roma 1909.
- MONTESSORI M., Manuale di pedagogia scientifica, Alberto Morano, Napoli 1935.
- MONTESSORI M., La scoperta del bambino, Garzanti, Milano 1950.
- MORAIS J., L'art de lire, Odile Jacob, Paris 1994.
- MUCCHIELLI-BOURCIER A., La prévention de la dyslexie à l'école, l'Harmattan, Paris 2004.
- PASCOLETTI C., Imparare a scrivere. Vol. 1. Le componenti dell'abilità di scrittura e prove di valutazione dei prerequisiti, Vannini, Brescia 2005a.
- PASCOLETTI C., Imparare a scrivere. Vol. 2. L'apprendimento, le disgrafie, il curricolo Smith, Vannini, Brescia 2005b.
- PIANTONI C., Omaggio della bella calligrafia, in «Fare Scuola/6. La scrittura. Quaderni di cultura didattica diretti da Frabboni F., Maragliano R., Vertecchi B.», La Nuova Italia, Firenze 1987.
- PONTECORVO C., Manuale di psicologie dell'educazione, Il Mulino, Bologna, 1999.
- RAYNER K. ET AL., How psychological science informs the teaching of reading, in «Psychological Science», 2 (2 Suppl), 2001, 31-74.
- SEYMOUR P.H., ARO M., ERSKINE J.M., Foundation literacy acquisition in European orthographies, in «British Journal of Psychology», 94, 2003, 143-174.
- SCALISI T. G., BOSCO A., ROMANO L., Difficoltà di apprendimento della lingua scritta. Problemi metodologici nella validazione di prove predittive, in "Life Span and Disability", 1, 2003, 87-120.
- SCALISI T. G., PELAGAGGI D., FANINI S., *Apprendere la lingua scritta*. Le abilita di base, Carocci, Roma 2003.

- STELLA G., PIPPO J., *Le difficoltà di apprendimento della lettura e della scrittura*, Ed. Moderne, Padova 1987.
- TRISCIUZZI L., "Percezione dello spazio e apprendimento della scrittura", in *Ci*bernetica e apprendimento, Lisciani e Giunti, Teramo 1974.
- TRISCIUZZI L., Manuale di didattica per l'handicap, Laterza, Roma-Bari 2002².
- TRISCIUZZI L., ZAPPATERRA T., La dislessia. Una didattica speciale per le difficoltà nella lettura, Guerini e Associati, Milano 2005.
- TRISCIUZZI L., ZAPPATERRA T., *La psicomotricità tra biologia e didattica*, Edizioni ETS, Pisa 2007².
- TRISCIUZZI L., ZAPPATERRA T., Dislessia, disgrafia e didattica inclusiva, in SIMONE-SCHI G. (a cura di), Dislessia e Disturbi Specifici di Apprendimento. Teoria e prassi in una prospettiva inclusiva, «Annali della Pubblica Istruzione», 2, 2010 a, pp. 51-76.
- TRISCIUZZI L., ZAPPATERRA T., Software didattici e interventi multimediali per alunni con disabilità. Il caso dei Disturbi Specifici di Apprendimento, in PARDI P., SIMONE-SCHI G. (a cura di), Nuove tecnologie educative per gli alunni con disabilità, «Studi e documenti degli Annali della Pubblica Istruzione», 127, 2010 b, pp. 151-168.
- TRISCIUZZI L., FRATINI C., GALANTI M.A., *Manuale di pedagogia speciale*, Laterza, Roma-Bari 1996.
- VENTURELLI A., Il corsivo: una scrittura per la vita. Prevenzione e recupero della disgrafia, Mursia, Milano 2009.
- VENTURELLI A., Scrivere: l'abilità dimenticata. Una prospettiva pedagogica sulla disgrafia, Mursia, Milano 2011.
- WOLF M., Proust e il calamaro. Storia e scienza del cervello che legge, Vita e Pensiero, Milano 2009.
- ZAPPATERRA T., La lettura non è un ostacolo. Scuola e DSA, Edizioni ETS, Pisa 2012.
- ZOCCOLOTTI P. ET AL., I disturbi evolutivi di lettura e scrittura, Carocci, Roma 2005.
- ZUCCHERMAGLIO C., Gli apprendisti della lingua scritta, Il Mulino, Bologna 1991.