



Ca' Foscari
University
of Venice

Master's Degree programme
in Language Sciences

“ordinamento ex. D.M 270/2004”

Final Thesis

**Multisensory Approach and Total Physical
Response in the EFL Support Lessons for
Students with Dyslexia**

Building sentence structure awareness

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Matriculation Number 858766

Academic Year

2019 / 2020

*To the ones I love,
who have sustained me
to pursue my dreams.*

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Abstract The present issue of this final dissertation focuses on the efficacy and on the application of the Multisensory Approach and of the Total Physical Response on the learning process and on sentence structuring concerning English as a foreign language in the Italian school scenery, specifically with a student with dyslexia attending middle school. The effects of the application of these methods can be seen at the level of EFL sentence creation and also on the aptitude of the learner towards the foreign language which have highly improved thanks to these methods. The first chapter is centred on the origins, features, and uses of the Multisensory Approach and of the Total Physical Response in the EFL learning process: the focus is on the application of these methods in the educational setting, specifically related to dyslexia. Chapter II is centred on the efficacy and benefit of MSL and TPR instruction and the value of movement games used in these methods; specific reference is made to vocabulary and grammar and the related issues encountered in FL learning. The third chapter provides an overview of dyslexia and its relationship with foreign language learning: in particular it focuses on the areas affected by dyslexia (i.e., phonological processing, working memory and processing speed), and the cognitive load and the emotional sphere are analysed, informing also the readers on the teaching support that can be used in the FL educational setting for learners with special needs. Chapter IV is about the single case study of the tutoring lessons with an Italian middle school student with dyslexia; in this setting, EFL sentence structure awareness is learnt through the acquisition of present simple, present continuous and past simple tenses, which is fostered by the application of the Multisensory Approach and of the Total Physical Response and it is sustained also through vocabulary instruction.

Introduction

The number of the population of students with learning differences is rapidly increasing: considering the Italian scenery, the total number of students who have been diagnosed with a Specific Learning Disability (SLD) is of 298,114, which is the 4.9% of the total number of students attending primary school, middle school and high school. Moreover, from 2010 the number of Italian students with SLD has increased, going from a 0.9% to a 4.9% in the academic year of 2018/2019 (Gestione Patrimonio Informativo e Statistica, 2020). In these percentages foreign language learners with language differences are also included, and it is very common for this category of at-risk learners to undertake an even more difficult and undermining learning experience, which is even harsher in the foreign language learning experience. Fortunately, in the foreign language learning panorama there are methods and techniques that help these learners to participate in a positive and motivating learning experience and numerous research has given evidence for the benefits of the introduction of these methods in the foreign language learning experience (Asher, 1966; Asher, 1969; Asher, 2009; Gohar, 2019; Schneider & Evers, 2009; Shams & Seitz, 2008; Sparks, 1998; Sparks & Miller, 2000; Teitelbaum, 1997). Since more students are in need for effective learning instructions, teachers should be aware of the appropriate instruments to be used in the educational setting. Therefore, there is the need for helping these students with language differences who struggle learning English as a foreign language (EFL) both scholastically and from an emotional perspective, and they require a timely and qualified intervention. For their features, the Multisensory Approach (MSL) and the Total Physical Response (TPR) have been selected and used in this research to account for these issues. These methods have been chosen because they stimulate multiple sensory channels simultaneously and they are based on the creation of associations between the body and the concepts learnt. These methods when applied to grammar allow students with dyslexia to clearly structure an English sentence at the syntactical level, but they also help these learners to increase motivation and self-awareness and also to improve their scholastic performance concerning EFL. Therefore, the question that led to the analysis of the study is the following: do the Multisensory Approach and the Total Physical Response allow Italian students with dyslexia to improve the acquisition of English grammar knowledge, specifically the syntactic structure, their aptitude and their scholastic performance? To answer the question a single case study was developed in order to achieve the aims mentioned in the question.

The aims of the final dissertation are the following. The first research aim is to apply the methods of MSL and TPR to EFL teaching with learners with dyslexia; the educational purpose is to support students with dyslexia to learn and to apply English grammar rules in order to achieve sentence structure awareness, which students with language differences struggle mastering. At the same time, awareness building not only leads to a scholastic success concerning EFL but also to a personal fulfilment: students benefit emotionally from this learning experience because it creates a positive learning environment, in which students feel highly motivated and they are encouraged and spurred to rely on their abilities and their knowledge without feeling judged and inadequate. The aims are achieved through the strategies implemented by the MSL and TPR methods, which also rely on movement games, and finally, through this instruction, students with dyslexia can apply autonomously the knowledge learnt during the learning experience to their EFL classrooms lessons. These aims are achieved because these students learn how to master the skills required to complete language related tasks, requiring automatisisation and long-term memory development, which are poorly developed in these students especially when no reinforcement is done.

As a consequence, the aims are achieved through the introduction of these methods to the case study. The qualitative ethnographic research develops in a single case study, for which a detailed portrait of the personal situation of the student was needed. To achieve the knowledge required, semi-structured interviews were conducted with the parents and with the EFL teacher of the participant. Moreover, also the observation grids and the Likert scale questionnaires were completed by the tutor and by the student respectively. Then the programme of the tutoring lessons started, which was based on the instruction of three tenses (present simple, present continuous and past simple) in their affirmative, negative and interrogative forms, which were compared and analysed. The methods employed throughout the research were the Multisensory Approach and the Total Physical Response, which were applied through their techniques, games and activities. By the end of the project the student was able to create simple sentences autonomously, retrieve grammar and vocabulary when requested and to automatise language related processes; moreover, the learner was more motivated and his self-esteem increased, feeling less frustrated and anxious in EFL related matters. The student was finally aware of his abilities and strengths and not only of his weaknesses. The results were completed by comparing the initial aptitude towards EFL outlined in the first Likert scale questionnaire to the same questionnaire at the end of the programme, by comparing the areas in the observation

grids which changed results between the initial and final stage of the compilation: the results of these instruments were then compared to the outcomes of the application of the programme.

In Chapter I the definition, the origins and the features of the Multisensory Approach and of the Total Physical Response are given, together with an explanation of the uses of these methods in the FL educational context. Chapter II focuses on the benefits of these methods, explaining their efficacy and the value of movement games in these methods; in the last part of the chapter FL vocabulary and grammar are analysed to provide some specific indications on how to process these language related skills in a student with dyslexia and how to overcome some related obstacles in the foreign language context. Afterwards, Chapter III provides a theoretical framework of dyslexia, underlining how the relationship between native and foreign languages, and the FL learning are affected by this “learning difference” as explained by Daloiso (2017). The last section of the chapter offers some instructions on the accommodations and modification that FL teachers can implement in their learning to create an inclusive classroom environment. Finally, Chapter IV is the core of this final dissertation because the MLS and TPR methods are applied to the FL issues of learners with dyslexia: the description of the case study, its aims, predictions and methods are provided, together with a presentation of the participant, his features and issues, and of the procedure of MSL and TPR based programme. The analysis of the research ends in the last chapter which provides the results and the discussion.

CHAPTER I

Multisensory didactical methods

Implicit memory is fundamental for the linguistic acquisition, because, since this part of memory is the most archaic part of our mind, it allows people to learn their mother tongue unconsciously and without any effort; this is due to the fact that acquisition of the native language (L1) is achieved through imitation of the linguistic input and in an implicit manner, through continuous exposition. These factors contribute to the process of automatization of the linguistic elements of language, which happens naturally. If these mechanisms of imitation are applied to the acquisition of a foreign language (FL), then the learning experience can be particularly efficient, especially at the beginning of the learning experience: the associative activity of the brain can encourage memorisation, especially when positive emotions, multisensory stimulus and creative, interesting and significative factors intervene. In other words, the language learning experience becomes very effective and reaches the automatization of the linguistic processes, becoming unconscious language *acquisition*. However, the FL *learning* process fostered in traditional grammar-ruled education is a conscious system of rules learning and it requires the explicit memorisation of linguistic mechanisms and rules (Sparks, 1991; Sutherland, 1978). To support the teacher to achieve a more effective FL learning experience, didactical methods can be implemented in the learning process: in multiple research (Crombie, 1997; Crombie, 2000; Sparks & Miller, 2000; Shams & Seitz, 2008; Schneider & Evers, 2009; Asher, 1966; Asher, 1969; Asher, 2009; Sutherland, 1978; Bui, 2018; Celestino, 1993; Rambe, 2019) it was highlighted how students with dyslexia benefit from multisensory and physical instruction when learning a foreign language because for these learners the learning experience is enhanced when more sensory channels are activated and, therefore, they do not have to rely only on one sensory channel used in a FL lesson, which at times can be also the most fragile one in a person with dyslexia. Added to this, these types of instructions help these students to create mental representations of linguistic concepts, which contribute to the efficacy of the learning experience. Moreover, Crombie (2000) observed how students with dyslexia need to use some language strategies which are utilised in their first language learning experience to help their FL acquisition. As a consequence, to make the FL learning experience more inclusive and easier for all learners, teachers should rely on language teaching methods which enhance a more efficient learning experience and which also teach the fundamental

components of language, such as grammar, semantics and phonology in a systematic way. This can be achieved by following methods which are easily understandable, repetitive, mind and body involving, motivational, stress-free and that they lead learners to achieve their educational goals as well. Furthermore, to help students with dyslexia in their acquisition process, these educational methods should also rely on and exploit the implicit memory since it enables people to be unaware of the mechanisms required to speak and it also creates a more stable language trace and learning in the brain. For all the reasons mentioned above and for being highly effective for students with dyslexia, in this section the focus is on the Multisensory Approach and on the Total Physical Response. These language teaching methods have been chosen for the purposes of this research and for the features of the type of learner involved in the FL learning experience: nevertheless, “non esiste solo un approccio, non esiste una sola strategia, sia di insegnamento, sia di apprendimento, ma esistono strategie adatte a situazioni diversificate. Dunque, non è superfluo ribadirlo, non un solo metodo, ma più metodi” (Gabrieli & Gabrieli, 2008, as cited in Cappa, Collerone, Fernando & Giulivi, 2012, p. 24).

1.1 The Multisensory Approach

The Multisensory Approach is a didactical method especially recommended for the learning experience of students with Specific Linguistic Needs because it stimulates different learning styles and it involves the use of multiple sensory channels simultaneously: these elements allow students with language differences to rely on different cognitive abilities, instead of being forced or being induced to use an ability which could be poorly developed in a learner with these features. When learners are given multimodal instructions following the MSL approach, students are more or less involved according to their personal learning style and preference, and this contributes to a greater FL acquisition and learning process. These assumptions have a neuroscientific basis, which have been described by the research in the field: in fact “the greater the number of pathways stimulated in the learning process, the easier it will be to remember information” (Murray & Wallace, 2012, as cited in Daloiso, 2017, p. 75) and this is the core of the Multisensory Approach. At first the Multisensory Approach was created in order to be used with learners with difficulties in reading and writing associated with dyslexia: today the MSL instruction is used in a plethora of areas and its benefit has been discovered especially in the

field of foreign language learning with SLN learners. In this section the origin, the features, the efficacy and the uses of the Multisensory Approach are provided.

1.1.1 *The origins of the Multisensory Approach*

Samuel Torrey Orton was a neuropsychiatrist, neurologist and pathologist specialised on reading failure and language processing difficulties. After reading a research of Hinshelwood about Congenital Word Blindness in bright children with reading problems in 1917, Orton became more interested in children having what he later called strephosymbolia. In 1925 he identified dyslexia as an educational problem and, together with his colleagues, he began using multisensory techniques in the mobile mental health clinic in Iowa. According to the research of Orton (1925, as cited in Aiello, Di Gennaro, Di Torre & Sibilio, 2013), language learning is favoured by the process of teaching phonic association with letter forms both visually and in writing to build correct associations. His work was then influenced by the kinaesthetic method of Grace Fernald and Helen Keller, which led him to sustain the thesis that the kinaesthetic and tactile reinforcement in visual and auditory associations could help dyslexic learners not to mistaken similar letters and to support the transcoding process. Afterwards in the 1930s, Orton “wanted the instruction carefully structured but not programmed, and it was to be adaptable to individual needs” (Henry, 1998, p. 9): Anna Gillingham, who was an educator and psychologist with a great mastery of language, was encouraged by Dr Orton to compile and publish her materials, which laid the basis for student instruction and teacher training. In 1936, Anna Gillingham and Bessie Stillman, based on the theories of Samuel T. Orton, created a didactical manual on the multisensory techniques for teaching written English, which included phonemes, morphemes and the spelling rules, in what it became known later as the Orton-Gillingham Approach. In this book Gillingham and Stillman described the language triangular: children first see a letter, then they have to trace it and say the letter name and/or sound. The other way is that the teacher gives the sound and name and the pupil repeats (Henry, 1998). After 1931 Orton and Gillingham started a partnership and continued the investigation in the field, after choosing different directions in the 1940s. Orton continued with his original work in which students had to say the sound of letters, while Gillingham together with Stillman published and expanded the multisensory approach, by which students are required to say the letter names. As a result of the application of the MSL instruction to the phonological aspect of a language, the

Multisensory Approach was then applied to other categories of language, which concern reading, spelling, vocabulary and grammar.

1.1.2 *Features of the Multisensory Approach*

Visual stimulus alone can require roughly a month of training and small achievements can be seen: however, if images are combined to sound, then learning is not only faster, but also more effective. When people experience a disruption in the processing to one sense, the other senses try to compensate for the weaker one. This can be explained due to the features of the human brain, which has evolved to “learn and operate in natural environments in which behaviour is often guided by information integrated across multiple sensory modalities. Multisensory interactions are ubiquitous in the nervous system and occur at early stages of perceptual processing” (Shams & Seitz, 2008, p. 411); unisensory trainings used in learning provide unnatural settings instead. For instance, multisensory training creates efficient and greater learning also because it reproduces the learning experience which occurs in natural settings. In fact, his language learning method emphasises the activation of multiple sensory channels simultaneously, allowing an input to be introduced and analysed through different pathways, enhancing memory and language learning. For example, writing and pronunciation are completed while students see, hear, speak and write the language simultaneously (Crombie, 1997), involving all the sensory channel of the learner, which are visual, auditory, kinaesthetic and tactile (VAKT). For instance, the Multisensory Approach has been identified as one of the most appropriate multisensory methods which teaches the fundamental components of the foreign language to students with dyslexia because it leads to a successful learning experience thanks to the use of multiple sensory channels together, without relying only on the weakest cognitive abilities of these learners, and it creates automatism of linguistic mechanisms.

The Multisensory Approach is usually associated with one-on-one teacher-student instruction: however, there are fewer uses for small-group instruction and successful adaptations have been used in classroom instruction, which can benefit all learners who have FL learning issues and not only students with dyslexia. When used in the classroom environment, the Multisensory Approach allows at-risk students to receive an inclusive education and helps them to learn new strategies to improve their language learning process. Nevertheless, in the classroom setting instructions have a universal curriculum approach, rather than being diagnostic and prescriptive

as it occurs in the one-to-one sessions (Peavler & Rooney, 2019). Generally, lessons are taught both in L1 and FL and at any time self-correction is encouraged, so that the student learns how to become an independent learner during the learning process.

Another feature of the MSL instruction is that it is based on direct and explicit teaching of language concepts, followed by clear explanations and demonstration of the rules of a language; in every lesson new elements are introduced and students review the materials previously learnt. This means that repetition, practice and revision are other key elements of this approach, which provide students with opportunities to over-learn, memorise and extract information, and to make skills automatic, activities which are achieved with difficulty through unisensory stimulation and which are usually weaker in a student with dyslexia. As a consequence, drills, frameworks and models are used because they are the best devices to convey this aim. Through this type of instruction, teachers manage to create a learning environment which fosters metalinguistic awareness, meaning that students achieve an explicit knowledge about language patterns, and they assess the learning process of students by potential cross-linguistic challenges, adapting the instruction when needed (Schneider & Evers, 2009).

Alongside the neuroscientific advances of the simultaneous activation of sensory channels, the MSL instruction implements explicit cross-linguistic instruction when teaching EFL: usually students with language differences struggle to make cross-linguistic comparisons and transfers of linguistic concepts from their first language to the foreign language they are learning. This difficulty is due to the fact that these learners have not received the explicit instruction describing how to make cross-linguistic comparisons and therefore they cannot rely on this device and generalise its use. On the other hand, in not-at-risk students there is a continuous cross-linguistic transfer of language skills from the L1 to FL, regardless the features of the foreign language (i.e., orthographic depth and complexity of the language), and this process occurs at all stages of language development. Therefore, these learners can rely on the L1 linguistic knowledge, which can be applied to the development of the FL, and this process allows not-at-risk students to achieve better results when compared to at-risk students. Consequently, the Multisensory Approach allows learners with language differences to learn and to use a method for applying cross-linguistic comparisons between L1 and FL because this device clarifies how and why the FL is different from the native language. These are helpful resources in the FL learning process because in this way these students can become more aware

and independent language learners, compared to the achievements reached by learners with dyslexia in conventional communicative approaches based on implicit processing (Schneider & Evers, 2009).

The MSL instruction has a diagnostic and personalised nature because lesson plans are tailored to the needs of students in order to focus on specific strengths and areas of support. Following the method applied to language learning, the teacher introduces systemically the linguistic elements of a language and then students gradually start to interiorise, to use, and to apply them: at first, students learn to read and write the sound of words separately and, only when the learners have acquired the competence and the mastery in the single sounds, they can start to combine them into syllables and then into words, moving then to other language skills which are more complex. This means that the Multisensory Approach is highly structured because it follows the natural acquisition of elements (as explained by Krashen), moving from simple to complex notions and activities by small cumulative steps, which are related and connected to previous analysed concepts. In the multisensory language instruction, also the material follows the logical order of language, therefore it starts from the easiest and then moves methodically and logically to the most difficult materials.

1.2 The Total Physical Response

The Total Physical Response (TPR) is a language teaching method based on the total participation both of physical and psychic movement; it enables students to understand oral commands (imperative sentences) paired with a corresponding gesture in the target language and to respond immediately to the command with physical actions without analysing the input. Physical actions, grammar rules and vocabulary are learnt even though they have not been explicitly taught to students because they are presented in context, and the notions are therefore more feasible, believable and connected to reality thanks to the kinaesthetic and realistic input provided. Asher, the founder of this method, believed that TPR helped learners in their long-term retention of information and especially that this strategy was stress-free and engaging. This explains the reason for the Total Physical Response of being student-friendly, giving the possibility to all learners to understand the information they hear and see, students with dyslexia

included. In this section the origins of the Total Physical Response, together with its features and applications to the foreign language environment are described.

1.2.1 *The origins of the Total Physical Response*

The Total Physical Response was developed in the 1960s by James J. Asher, and he defined it as “an experience rather than a concept” (Asher, 2009, p.1). He was a professor in psychology and was interested in applying the theories of psychology to language teaching and learning. According to Asher, one of the issues encountered by humans in learning is “how to achieve fluency in a foreign language” (1966, p. 79) and by trying to suggest a possible solution he invented the Total Physical Response. He applied the strategy to help people learn Japanese, Russian and other foreign languages: the training always began with “brief one-word utterances, but within thirty minutes, the morphological and syntactical complexity was increased” (Asher, 1966, p. 79) and during the instruction the subjects were instructed to be silent, to listen to the foreign language and to repeat the exact actions done by the instructor. The results showed almost perfect retention in listening to the foreign language, going from school children to adults. In fact, also adults benefitted from this method because usually their FL learning experience is independent of physical action and it tends to be stationary and inert: the results of the experiments done by Asher showed how adults understood complex foreign utterances in a short amount of training with the strategy of the Total Physical Response, and how they could exceed younger learners in the FL learning. Through the research achieved in the field, the results showed that better results are achieved when learners obtain listening fluency or when they know more about listening before trying to utter alien sounds: previous research supported the idea that “when one tries to learn listening fluency and speaking simultaneously, the forced noise-making may function as a stressful stimulus which tends to erase, prematurely, memory traces for understanding” (Asher, 1966, p. 81). Moreover, in this research it was seen how writing is a task which is more difficult than acting or speaking. In 1969 Asher completed another research which had the same research question as the previous one (i.e., how to achieve FL fluency): he stated that in the school programmes of the period foreign language training was given one hour a day, and therefore it was unrealistic to expect language fluency in the four language abilities of listening, speaking, reading and writing. For instance, Asher suggested to focus the attention only on one language skill, “the one which has the maximum positive transfer to the other three skills” (1969, p. 4) and the decision went on

listening, because of the positive transfer that comprehension would have had on speaking and then also on reading and writing. When listening fluency is achieved, then the learner may be ready to speak in the foreign language. Also for this research he relied on the Total Physical Response, because he observed how children understand and obey a complexity of commands before being able to speak their mother tongue. It was in this same research that Asher defined TPR: “the strategy of the total physical response is to have the students listen to a command in a foreign language and immediately obey with a physical action” (Asher, 1969, p. 4).

Moreover, according to the findings TPR can be segmented into four components: position, concurrency, cue and sequence. The position is referred to the location of the subjects in the room while the action is completed, and this parameter can give subjects information on the possible direction given in the next command, even if they have to return to a neutral position after completing an action. Concurrency is another component considered because subjects might move before the entire utterance in FL is pronounced; in this way, less attention is necessary instead of waiting for the entire utterance to be said before moving. The third parameter is cue, which refers to the location of the objects manipulated by subjects in the room, because their position allow subjects to predict the probable direction of the command that could follow. Finally, sequence is the last component: it refers to the features of the patterned foreign utterance in each retention test, meaning that the sentence sequence was highly predictable (i.e., if the command was *run* then the following would be *stop*). In other trials, sequence was eliminated showing a decrease of retention. However, these elements alone do not explain the acceleration in learning, which is demonstrated by the kinaesthetic event performed by the student instead. Another aspect considered in the tests was the introduction of translation from the FL to English: this component decreased listening comprehension, instead of enhancing it, in fact this was later explained in another paper in which Asher said that “experience, often only one exposure, results in long-term retention while translation after many exposures is most often limited to short-term retention” (2009, p. 1). In fact, experience is aptitude-free, meaning that everybody with average intelligence can internalise any target language, whereas translation is aptitude-dependent, meaning that a small number of the students will achieve fluency following this activity. The same effect was confirmed when listening and speaking were inserted together, which showed a severe retardation of listening comprehension. Finally, this study proved how adults might outperform children on retention, when they both learn a second language under the same conditions. However, “children

younger than puberty have a biological advantage in acquiring a native pronunciation of the new language” (Asher, 2009, p. 10), while a few adults achieve a near-native pronunciation even if they will have some accent.

Some criticism was moved on the ability of TPR of representing abstract concepts, but in 2009 Asher demonstrated how learners could understand concepts such as *love*, *government* and *justice* only by using a simple card technique: the vocabulary items were printed on cardboard with the correspondent word in the foreign language on one side and the mother tongue language on the back of the card, and learners had to place these cards in the positions commanded by the teacher. It may appear that this is translation, which it is, but Asher observed how it is limited to single vocabulary items, which are internalised through motor behaviour and not by translating long sentences or paragraphs. After the first experiments conducted in the field, the Total Physical Response has been used in many ways by teachers, instructors and students in different fields of the language learning and acquisition process.

1.2.2 *Features of the Total Physical Response*

The language acquisition method of TPR features giving commands and commands sequences to create language comprehension and eventually language production and acquisition, thus it is also known as the Command-Action teaching. To convey the aims of comprehension and production, Asher followed the mechanisms humans unconsciously use to learn to speak their native languages: this process happens in context and by responding to commands without the need of providing any formal grammar lesson or language rule. In order to understand the features of the method in depth, the three methodological cornerstones of the Command-Action Approach to language instruction are presented and then analysed:

1. Understanding the spoken language should be developed in advance of speaking.
2. Understanding should be developed through movements of the student's body. The imperative is a powerful aid because the instructor can utter commands to manipulate student behaviour. Our research suggests that most of the grammatical structure of the target language and hundreds of vocabulary items can be learned through the skilful use of imperative by the instructor.
3. Do not attempt to force speaking from students. As the students internalize a cognitive map of the target language through understanding what is heard, there will be a point of

readiness to speak. The individual will spontaneously begin to produce utterances (Sutherland, 1978, p. 205).

To fully understand the first and the third cornerstone, comprehension must be considered. At the basis of the TPR there is comprehension, which is the key developed from the beginning of the method, and there are two basic assumptions related to this concept: comprehension precedes production, and the silent period has to be respected to avoid frustration. Students following TPR are not obliged to produce language as they begin their acquisition process: responses are always accepted when the learner feels ready to start producing language, so teachers and instructors have to respect the timing of learners because speaking will eventually begin. This method allows learners to show that they have understood the input, but they are not required nor obliged to produce language to prove it, either verbally or by writing it: input alone is a sufficient condition in language acquisition and the effect of comprehension are showed by actions. As Asher observed, children acquire their native language unconsciously without being explicitly instructed on the linguistic forms and rules, also because they are not forced to produce utterances until the silent period is over: moreover, children respond to input through physical movements (Bui, 2018) and their responses consistent with the request are the proof that language is being understood, even though they do not speak. The moment in which children start to speak they are not corrected continuously, but they learn their native language thanks to exposition and to a guided and patient support. Based on these assumptions, it is comprehensible why errors are more tolerated when learners start to speak in TPR lessons. Asher limited the error correction during the Command-Action sessions because:

When the student begins to speak, the individual's entire attention is directed at trying to produce, so the student cannot attend efficiently to feedback from the instructor. Thus, feedback should not interrupt a student in the middle of an attempt to express a thought. The feedback should be gentle, rather than harsh and sharp. And the feedback should be modified by a wide tolerance for errors. The instructional goal should be uninhibited communication that is intelligible to a native speaker. We want students to talk and talk and talk. Eventually, they can be fine tuned for more perfect speech (Sutherland, 1978, p. 205).

According to this view, production cannot be taught because it has a developmental feature which increases with the expansion of the information of the language being learnt.

Consequently, since production is a developmental phenomenon, errors are necessary while speaking and they will be reduced through practice and exposition, as it occurs in native-speaking children (Sutherland, 1978). There are devices that teachers and instructors can use to gently shape errors, for example by using recasting, confirmation check or clarification requests to provide the correct alternative instead of explicitly correcting the errors.

The second cornerstone is about commands and related movements. The motor engagement performed during TPR manages to stabilise the mnemonic trace by the person who observes and also by the person who completes the action; this process is possible thanks to the activation of mirror neurons, which are activated when an individual does an action and also when the same individual only sees the action completed by another person. These neurons have a central role in language acquisition and in the communication of the mother tongue, allowing the storage of information in the long-term memory (Cappa, Collerone, Fernando & Giulivi, 2012). Therefore, the efficacy of the TPR method is also explained through neurological mechanisms, which are developed thanks to the exposition to language done through commands, involving the visual, kinaesthetic, auditory and tactile channels, and the action, which is initially physical.

All these features described in the cornerstones help to support the advantages of using TPR for FL instruction: the use of the Total Physical Response reduces stress in students, helping them to achieve life-long learning because language contexts are continuously being recycled, and it does not need any analytic or academic skill, but the mere body involvement. Moreover, it is “an aptitude-free approach that gives everyone a chance in language learning” (Bui, 2018, p. 3), which renders it a highly inclusive method for dyslexic learners, and it can be used with young people and adults as well.

1.3 The MSL and TPR instruction in the FL classroom

Effective treatments to overcome the difficulties due to dyslexia can be implemented in the educational setting also to achieve positive results from the point of view of inclusion because it leads to the improvement of the results in terms of learning abilities and consequently to the emotional and psychological sphere. In fact, the educational aim enables all students, also the ones with dyslexia and other learning differences, to achieve the goal of managing the foreign

language and the multimodal environment can favour the acquisition of a FL, especially when following the steps used in the acquisition of the mother tongue. In this chapter the MSL and TPR instruction are analysed in the context of the FL classroom.

1.3.1 *MSL instruction in the FL classroom*

All lessons of any school subject can ensure a level of multimodality by analysing the features of the unit and the activities and possibly by adding some supports to enhance the level of accessibility. In this section the teaching method, the materials together with some accommodations and modifications, and the application of Multisensory Approach to the foreign language context are described.

During a lesson which follows the MSL approach, teachers use a specific instructional technique with the demonstration of knowledge through the involvement of multiple senses. Concerning the performance, teachers should repeat information often, giving direct, explicit and logical instructions, trying also to maximise the engagement of students by maintaining the pace of instruction; however, this aspect is challenging enough because teachers have to maintain interest but, at the same time, slow enough to avoid frustration or confusion, also trying to avoid reteaching the skill or the concept explained previously, in order to limit teacher talk. Moreover, instructors use synthetic and analytic approaches and they regularly assess the ability of learners to generalise the rules learnt. Another feature of the multisensory lesson is to use choral rather than individual responses and to follow each procedure without eliminating or skipping parts, because every procedure teaches, coaches or reinforces instruction. Furthermore, students must engage and participate in each lesson procedure in order to achieve complete engagement. According to the research done by Peavler and Rooney on the MSL approach, there is a separate section dedicated to how to do quick and simple error-correction procedures in a multisensory way. Students are encouraged to correct the error on their own, nevertheless, the teacher can intervene by “isolating the error, cueing with simple prompts, providing the correct sound/spelling/rule only as a last resort, and supporting students in applying the correct information and attempting the task again” (2019, p. 223).

Students can create their personal materials such as flashcards, colour-coded cards and mind maps which increase the engagement to the FL lesson. Language resource folders are another important tool in which lists, summary information sheets, and concept maps of the language

strategies learnt can be found and compared easily by the student. This folder can be created together with the learner to increase the participation and the involvement in the language learning process and to associate, document and illustrate concepts in order to retain information easier. Simple adjustments that can be introduced are related to colour-coding to identify specific elements (i.e., morphology, word order, suffixes, etc.) or also by using cards, Lego bricks or playful activities. Dalorso (2017) showed some of the integrations that can be done to the activities and the materials presented in a foreign language multisensory lesson. Videos are more dynamic because they offer a wider range of non-linguistic input and they involve both sight and hearing. In fact, when watching a video, images can show information about the context, the role of the character and the objects involved, but also intonation can give evidence to some aspects, such as the emotions of the characters, their beliefs and the decisions taken. All these aspects can be gathered by inferencing and by grasping the general meaning, this means that in some cases the listener does not need to be a language expert when watching a video, because most of the information can be gathered from extra linguistic elements. Objects are another multisensory support which involves sight, hearing, touch and taste: the presence of objects in a foreign language lesson is not to be underestimated, not only because they are realistic, but also for being a link with the foreign culture. Moreover, these elements spark the interest of people because they can visually see and touch what words cannot show sometimes. Coloured posters and mind maps involve sight and touch: the power of these devices is often underestimated, even though they are very appealing for learners, especially for learners with special needs. Teachers together with students can tailor these supports, such as by highlighting specific elements or by choosing colour coding together; all the decisions can be customised according to the needs and learning styles of learners. Finally, movement is very powerful because it involves the major number of senses and, most importantly, it is authentic and comprehensible communication; when paired with the Total Physical Response, it can be associated to a wide range of stimuli.

The original use of the MSL instruction was to raise phonological awareness because, when learners are aware of the different phonological units and when they can break these units and put them together, students are able to map the sounds to the appropriate letters and then they can move to other language related activities. Nevertheless, the method has been applied also for learning to read and to spell through hearing, seeing, visualising, pronouncing and writing words, and also for reading, vocabulary and grammar instruction. When applied to the

multisensory context, all these activities follow four specific phases: explicit demonstration of a language concept, guided practice done by the student, free practice in context, and summarising the learned information, which provides mnemonic assistance throughout the FL learning path. Each multisensory lesson begins with a brief oral warm-up exercise in which the teacher asks students questions about the date, the features of an object, or the activities they have done during the day; also students can ask questions to each other. This part of the lesson should be done with the target language since it is introductory, and it should also include the vocabulary learnt in the previous lessons and also the new vocabulary which will be introduced during the lesson. Schneider and Evers (2009) and Sparks and Miller (2000) provided some examples to the many uses of the MSL principles in EFL, applying them to pronunciation, spelling and reading, vocabulary and grammar, and they also devised some questions at the end of each language skill to raise awareness of the FL and the relationships this language may share with the native language of learners. The following section analyses the application of the multisensory approach to the aforementioned language skills, giving more emphasis to vocabulary and grammar.

Pronunciation

The Orton-Gillingham method started from the development of the phonological awareness to identify and to handle single phonemes moving then to other language related activities. MSL instructors provide an explicit and multisensory pronunciation and practice of the basic letter-sound patterns in a language, which lead to a relevant improvement of the correct pronunciation by learners: this approach to reading fosters the reading and spelling abilities of L1 and FL students, compared to the ones who are not taught or who do not learn letter-sound relationships. The original method focused on this linguistic aspect to help language learners with dyslexia to become better readers and spellers, and it used the Simultaneous Oral Spelling (S.O.S.) technique. First of all, a card with the symbol of the sound is shown and it is pronounced slowly and clearly by the teacher and then the student has to repeat it. The following step is the correspondence between phoneme and grapheme: letters are introduced with a key word, which is repeated every time the phoneme is introduced, because this process enhances memorisation (e.g., for letter “d” the word *dog* is introduced every time). The third step is to write the letter slowly and to explain the shape and the orientation of it: children follow the steps of the teacher and then they trace, copy and finally write the word by heart without

following an example. The letters are then written on paper, sand or on rice and repeated aloud simultaneously to establish a visual-auditory-kinaesthetic association. To summarise the practice, the first step is to follow a visual drill (letter name, keyword and sound), and then participants move to the tactile drill (skywriting, letter name, keyword and sound). In order to foster automatisisation and independence, students can create a personal deck of letter-sound cards to which cards are added every time a new letter-sound pattern is learnt and they can experience authentic uses of the new topic learnt in context (i.e., riddles, poems, stories, etc.), and they report and summarise the topic in the language resource folder. These are the steps used to build phonological awareness because through this technique the student learns the features and the sound of the letter, how speech organs work to pronounce it and how the arm moves to produce it when skywriting or when writing. Students reach a stadium in which they no longer need to trace a word in order to memorise it, but they know how to spell the word by looking at it, saying it and writing it. Each sound-symbol relationship is practiced many times during the lesson and it is repeated also in the following lessons; the order in which elements are presented follows the institutional programme, meaning that vowels are presented first and then consonants with a similar L1 sound follow. It is very important to highlight the differences and the similarities between the phonology of the native language and the foreign one so that students can predict the relationships between the sound and the symbol.

Spelling and reading

When students have acquired the basic principles on how to pronounce words, then they can start to master the word decoding skills. These skills strengthen the spelling and therefore the reading skills of language learners with dyslexia: also in this case, explicit and cumulative instruction, together with practice are needed. At the beginning, teachers show and explain to the students how to divide unfamiliar words into syllables, moving from the most simple to the most difficult words; then, students can start to read the syllables of the word analysed before blending these syllables into the whole word. The explicit instruction is also combined with many practical devices, such as highlighting words, using sticky notes and graphic organisers, and also graphic key information such as flow charts and notes. To put into practice the new spelling pattern learnt, guided reading practice including words and sentences are provided; then students can begin the free practice in context preparing riddles or stories using the information learnt. As students reach the end of the spelling and reading MSL instruction, they

can summarise each strategy using labels, graphic representations, descriptions on use and comments about the reading and spelling rules, so that they can look at the information when needed. The reading stage can be also presented when vocabulary and grammar have been incorporated in the student practice, helping them to see the notions applied in context and to do additional practice on these topics.

Vocabulary

Having achieved a level of mastery that allows students to blend, pronounce, spell and to read words, vocabulary can be tackled. It has been noticed how at-risk students are not able to achieve effective FL knowledge because they have gaps at the vocabulary level: these gaps can be filled also through multisensory instruction, specifically designed for this linguistic skill. During vocabulary practice, students should “hear, see and read, and say a word until it is learned to automaticity” (Sparks & Miller, 2000, p. 129). At the beginning of the FL curriculum, teachers can present images, flashcards and classroom utensils to present the base vocabulary students have to learn, then colour-coded cards can be introduced to present different functions and elements of a word (i.e., prefix-root-suffix, category). To increase the understanding of vocabulary, instructors have to enunciate clearly the words and to support oral language with gestures, as done with the Total Physical Response method (Asher, 1969, for further information see section 1.2). Students can also create their own vocabulary word review system with the image on the front of the card and on the back all the information about use and pronunciation. Since advanced vocabulary includes idioms and phrasal verbs some aspects must be considered, especially when presenting them to students with dyslexia: these elements must be taught explicitly because the meaning cannot be always reconstructed through mere translation of the single parts. For this reason, instructors have to present directly the use and the meaning of these elements and if they are similar, only one or two expressions should be presented to avoid confusion. To practice vocabulary students can create flashcards, play *Charades* or *Pictionary* and also write the newly learnt words in a familiar context: this guided stage is helpful for the teacher to identify if any strengths or weaknesses are present at the vocabulary comprehension level. Afterwards, the student freely produces short passages by writing poetry, riddles or short statements. At the end of the vocabulary practice, the student summarises the information learnt on a reference sheet with the new vocabulary patterns and functions, personal sentences and ways to remember the words.

Grammar

Direct grammar instruction is critical for the success of learners with dyslexia. When grammar is taught explicitly, the foreign language performance, the oral and the written use of grammar of at-risk students improves over time; also think-aloud practice is a helpful device which enhances the understanding of the FL grammatical mechanisms. In the Multisensory Approach grammar rules are presented one at a time in structured exercises and they are explained in the native language of students; then, the rules can be explained and modelled in the foreign language following the multisensory instruction. In this first step of MSL instruction of grammar the instructor uses colour and shape manipulatives to demonstrate explicitly the reasons for grammar features, such as the manner in which words require specific grammar changes, the way sentence types are created and how the right punctuation should be used. To achieve these explanations, teachers can recur to the use of Lego bricks, Cuisenaire blocks or colour- and shape-coded cards: these devices are very helpful to handle and to see the sentence structure of a language, tools which are powerfully effective for students with dyslexia who rely on the visual, kinaesthetic and tactile sensory channels. While using the MSL instruction in a grammar lessons, teachers first say the target sentence and use cards, bricks or a Cuisenaire rods for the correspondent elements composing the sentence (i.e., subject, verb and object), and then the instructor provides also the written component by using colour-coded cards with the words written on them. This strategy was used by Soldi in her research and in her Multisensory Approach programme of EFL sentence structuring (2019). In the meantime, the teacher provides also the reasons for the rule application and can also provide mnemonic devices to support students to remember the way the sentence is composed; on the other hand, students follow the instruction by engaging in choral repetition and think-aloud procedure. In this way the teacher can have a general overview of the elements that should be revised and need further practice. In this first stage of explicit demonstration, instructors can illustrate the mechanisms of punctuation by providing exemplifying cards with the punctuation marks. The second step in MSL grammar instruction is to begin with guided grammar practice: at this point, students are guided in activities developing their confidence in self-correction procedures, also for learners with language differences. Usually, colour-coded didactical materials are used in two steps: at the beginning, students put into practice the new language concept by following colour-coded procedures as shown by the teacher in the first step, and they have to write the sentences created on paper. In the second stage of the guided practice, students use blank cards so they

can demonstrate whether the new language concept has been understood, instead of using colour-coded manipulatives. After the guided practice, students can complete the free grammar practice stage in context: learners can write poems and short stories to demonstrate the importance of the grammar practice in context. At the end of the free-grammar practice, the student summarises the information learnt on a reference sheet with the new grammatical knowledge, together with some personal comments on grammar and its relationship with the L1, personal sentences and ways to remember the grammar instructions.

1.3.2 *TPR in the FL classroom*

The Total Physical Response is used in the educational setting in many areas of foreign language acquisition. It is a method which is easy to comprehend and to handle in the classroom, also because no textbooks are required and it can be introduced through simple but efficient devices in curricular lessons. This method has been very useful in terms of FL instruction to learners with Specific Linguistic Needs, especially dyslexia, and it has been implemented in foreign language lessons because it helps these learners to understand what they hear even if instruction is given in another language, and they are also more willing to participate and to speak compared to rule-governed lessons (Celestino, 1993). Teachers can use TPR as the only method to teach a foreign language, but they can also use its strategies for extra activities or supplements to the curricular programme and for pre-speaking activities at the beginning of their lessons. TPR can be implemented in different moments: at the beginning, during and at the end of the FL lesson. When used at the beginning of a lesson, the teacher sets achievable goals and verifies what students know, because in this way the new language items are combined with the old notions and repetition is done at the same time. For this moment, visual aids (pictures, objects, photographs or flashcards) are needed. In the during-phase, the teacher demonstrates the action, gives instruction and invites the learner to do the same: when the student has associated the command to the action, the teacher only provides the instructions orally. Finally, when TPR is used at the end of the lesson, the teacher shows the students the written command on a card or by projecting it on a screen: this step reinforces spoken instructions. As students progress, the commands become longer and more complex and the input is increased and intensified, but repetition is always done to provide enough clues to understand the meaning of an utterance in different contexts. In these stages only listening is required: whenever the students feels like it, they can start to speak. Following TPR instruction,

activities can be more accessible when the tasks do not involve a linguistic action and they focus on other skills, such as *colour*, *choose* and *complete*. Contrary, when they require more skill automaticity, such as *translate*, *summarise* or *take notes*, these tasks are less accessible to students with dyslexia. According to Richard-Amato (2003, as cited in Rambe, 2019, p. 54), there are at least eight TPR activities that can be done during curricular lessons:

- a. *Pointing game*: learners are asked to point at a variety of elements being taught, which can be objects in the classroom, body parts, pictures, cards or slips of paper.
- b. *Identifying emotions*: students have to choose a specific picture displaying a facial expression, which corresponds to a picture of people showed by the teacher.
- c. *Putting on and off parts of things*: the learner has to assemble or disassemble an object composed of different elements following the instructions of the teacher.
- d. *Manipulating items*: students are given small items in a variety of shapes, types and colours and, following the instructions of the teacher, they have to put the objects in certain positions.
- e. *Bouncing the ball*: each student receives an identity, either with the names of the days/months or with a number, and the teacher tells the students to bounce the ball to the student representing the name of the element mentioned (day, month or number).
- f. *Working with shapes*: the teacher gives the students different pieces of paper in shape, colour, amount, and learners have to pick up a specific piece of paper under the instructions of the teacher. This method can be used to teach cardinal number classification.
- g. *Following a procedure*: teacher gives a procedural demonstration of doing or making something and the students have to listen and copy the actions.
- h. *Information gaps*: students can work in pairs or in groups in order to possess series of information or pictures which their pair/group are missing. The aim of the students is to ask for the missing information using imperatives in the target language.
- i. *Role play and drama*: the teacher reads a text describing a certain setting with related information and the students act the scenes at the same time.

Another activity, which resembles the task of following a procedure, is the following: the teacher acts the commands given, accompanied by the imperative sentence, and the student copies the action without repeating the verbal utterance. In the following step, the teacher only

says the command without doing the action, while the student has to do the action: this stage enhances comprehension. Finally, the student either does the actions randomly or the teacher can act the imperatives and the student has to guess the name of the action. However, instructions should not be too predictable, because in this way students may adapt and become bored; this is the reason of the introduction of novel sentences and that utterances are varied to impede the mere memorisation of a fixed routine. Nevertheless, no more than five or six commands per lesson should be introduced to avoid overloading and confusion, also because commands, words and grammar rules are repeated in every lesson alongside the old notions already presented. This is the most traditional TPR activity, others can be *Pictionary*, *Simon Says* and also *Charades*.

CHAPTER II

The benefits of the methods

The Multisensory Approach and the Total Physical Response, when applied to sentence awareness building, allow the creation of tangible links among the abstract concepts of grammar with concrete elements that are as a consequence easily automatised and learnt: the explanation relies on their methods because the concepts of the basic elements that compose a sentence (i.e., subject, verb, object and nominal part) are automatically related to a mental image of the element, to a physical action, a visual image provided by a card and to the position of these elements in a sentence that the student creates personally. Thanks to this strategy, the learner with dyslexia does not need to overload the working memory and therefore lessons are more enjoyable because they transform into a stress- and judgment-free context, in which the student is spurred to try without being afraid of making mistakes. Since the processes developed with the MSL and the TPR methods are highly redundant, the mental associations created by the student transform into established long-term concepts, which can be used in autonomy and automatically, achieving the goal of automatisation which is the main burden on learners with language differences. All this is possible due to the kinaesthetic techniques, which are movement games, used in the Multisensory Approach and in the Total Physical Response: games stimulate learning relying on stress-free activities and they enhance motivation, when applied to EFL learning experience. These techniques create a positive learning environment and consequently they lead to the total engagement of the student, who feels safe and engaged in this learning environment. When performing movement games, educational purposes are achieved because students learn language notions, vocabulary and grammar implicitly, through practice in a constant and natural way, enhancing motivation and self-esteem. Furthermore, since these approaches lead to automatisation and autonomy, students with dyslexia are enabled to apply the strategies learnt through these methods to their school career, allowing students to complete the exercises required by EFL lessons. Many exercises provided in the EFL textbooks have the following features:

- Gap-filling exercises in which words are deleted following a precise criterion to fulfil a didactical aim (e.g., *Complete the sentences with am, is or are*).

- Matching exercises in which the students have to link two corresponding elements, such as pronoun with auxiliary, question with answer, word with image, word with definition or phrasal verbs.
- Odd-one-out exercises in which the learners have to decide which element does not fit in the sentence or in the group of words.
- Choose the correct option from multiple choices either from a box, a list or among two or three options. This kind of exercise is used to verify the lexical, comprehension and morphosyntactic knowledge.
- Sentence transformation exercises in which the students are asked to change the sentence into the affirmative, negative or interrogative form.
- Ordering exercises in which the sentence has to be ordered by observing the elements given.

All these exercises require linguistic and processing abilities that a student with dyslexia cannot master completely without adequate instruction. For example, the abilities required for completing the exercises mentioned above are the following: automatisisation, retrieval of concepts from the long-term memory, systematisation of concepts, discrimination of the correct answer, which is achieved when a concept has been learnt, decision making, choosing between more possible answers based on how the concepts have been internalised and systematised in the mind, knowledge of the grammar rules and in general language related notions. Therefore, a student with dyslexia has difficulty completing these exercises if there has not been adequate instruction of how to handle them. This is the reason why the single case study of this research integrates the Multisensory Approach and the Total Physical Response methods because, apart from clarifying and using the English sentence structure and creating a positive learning experience, they also enable this category of students to complete exercises in their classroom environment in autonomy: this is achieved through the focused strategy provided in the programme which enables these learners to achieve these exercises at school thanks to automatisisation and long-time memory development. In this way, students with dyslexia achieve metacognition because they become aware of the best ways for them to learn and they are able to apply what they know (Crombie, 2000).

2.1 The efficacy of the Multisensory Approach

The beneficial effects and the efficacy of the Multisensory Approach on language learning for students with dyslexia have been sustained by various research both in L1 and FL learning environment. The National Institute of Child Health and Human Development (NICHD) has shown the value of explicit, structured language teaching for all students such as the multisensory instruction, especially for learners with dyslexia; the same value to the method was given also by Shams and Seitz, who believed in the efficacy of this type of instruction because “our experience in the world involves constant multisensory stimulation. For instance, visual and auditory information are integrated in performing many tasks that involve localizing and tracking moving objects [...]. Multisensory-training protocols can better approximate natural settings and are more effective for learning” (Shams & Seitz, 2008, p. 411). Also the research conducted in the field of foreign language learning has given evidence of the positive effects of the Multisensory Approach when applied with students with dyslexia: in her research, Teitelbaum demonstrated that “all the pupils benefitted from the multi-sensory learning experience, but it was found that the majority of them were eventually able to integrate into the normal English lessons of their home room class” (1997, p. 218). Moreover, a research fulfilled by Alwaqassi (2017, as cited in Gohar, 2019) reported the perceptions of teachers after using this method: the results showed a common agreement of the benefits of the application of the Multisensory Approach with students with learning differences, because in this way learners were more engaged with lessons. Also in a research of Sparks and colleagues (1998) it was found that at-risk FL learners achieved levels of oral and written FL proficiency equal to those of not-at-risk language learners after the use of MSL instruction in the foreign language for two years; moreover, an increase in FL aptitude and proficiency, a gain in the FL word recognition, pseudo-word reading and reading comprehension were also registered (as cited in Schneider & Evers, 2009; Sparks & Miller, 2000). Shams and Seitz (2008) also reported how auditory-visual training exceeds the visual-alone training, that multisensory training provides higher relationships between stimuli and prior experience and that it activates a wider network of brain regions, providing superior memory capacity. Since the population of FL learners with language differences is increasing, teachers and instructors have to rely on methods and techniques that can help them to fulfil the personal and educational aims of learners: this is what the Multisensory Approach tries to achieve through its implementation and the research showed

how this method is very versatile in the field of foreign language learning because it can be applied both to literacy and to communicative skills.

Added to the research conducted in the field of FL instruction, the Multisensory Structured Language Learning (MSL) approach is highly versatile because it can be used to teach grammar structures, vocabulary, pronunciation, sound and spelling systems, and listening, reading, speaking and writing skills in L1 and FL. Moreover, it can be used with a wide range of learners, even though its use is highly recommended with learners with dyslexia: in fact, multiple sensory channels are activated simultaneously and therefore it helps bypassing the limited processing capacities of each individual channel (Shams & Seitz, 2008), but also because a movement or an image is associated to the language, which create a wider mental representation of a concept, thus more stable. Together with an audio input, the movements of the images of the MSL instruction help to lighten the cognitive load experienced by learners with dyslexia and it offers complementary ways for memorization. Not-at-risk students may succeed in their FL learning process also without explicit and direct instruction; however, the FL acquisition of learners with language differences is influenced by the type of instruction given, making the Multisensory Approach an effective language acquisition method. In fact, research has proved how students who have received explicit instruction on language become better spellers and readers compared to students who have not received this type of instruction (Schneider & Evers, 2009), and this was verified also with students with dyslexia.

2.2 The efficacy of the Total Physical Response

As mentioned above, the Total Physical Response follows the same acquisition system as the mechanism involved in the first language acquisition. The natural approach of learning a foreign language is based on the way students learn their native language, therefore, first by listening and speaking, then by reading and writing. The first competences developed in the L1 are the phonetical competences, contrary to what happens in the FL context; in case of phonological issues in the mother tongue, these difficulties can be transferred also in the foreign language, making the process difficult to be achieved. In fact, the phonological ability allows learners to distinguish sounds in a string of words and to foresee the sounds which will be used next to produce language; nevertheless, this ability is weak in the native language of students with

dyslexia, meaning that the issues are also present in the phonological ability of the foreign language. To understand the efficacy of TPR, the foreign language acquisition stages involving both L1 and FL acquisition, described by Krashen and Terrell, should be analysed (1983, as cited in Cappa, Collerone, Fernando & Giulivi, 2012, p. 5):

- a. *Preproduction*: this first stage is also known as the silent period in which contextual comprehension is based upon active listening. The learner has a vocabulary of 500 words and can simply repeat the words heard, in fact learners generally do not speak in the new language at this stage. Preproduction has a different duration, depending also on multiple factors, such as the type of learners, who can be introvert and self-conscious about their personal difficulties, for example of not being able to correctly pronounce some sounds or maybe the learner can be worried to have a bad performance with the teacher and with the peers. Supporting the silent period has benefits on the learning experience involving the FL, and teachers can help by introducing role games and cooperative activities in order to foster communication.
- b. *Early Production*: this is the phase in which simple spontaneous outcomes are produced and the learner has a vocabulary knowledge of 1,000 elements, enabling the production of sentences with one or two words. The sentences created are short and automatic with the presence of some mistakes.
- c. *Speech Emergence*: the vocabulary knowledge of this step reaches the number of 3,000 words; in this stage the learner can communicate using short sentences both oral and written, understand simple instructions or stories, start a conversation, answer closed answers using *yes* or *no*, complete sentences and answer questions with multiple options.
- d. *Intermediate Fluency*: at this point, the learner knows 6,000 words, enabling the creation of complex oral utterances and written sentences. Thanks to the richness of the vocabulary, the learner can express personal opinions, share personal thoughts, ask for clarification and use the language also in other subjects. This is the first stage that allows the learner to transfer the strategies used in the mother tongue to the foreign language.
- e. *Advanced Fluency*: this last step is achieved in four or ten years in language exposition, and it allows learners to use the language for studying purposes, what Cummins defined Cognitive Academic Language Proficiency (CALP).

It must be considered how the speed of the progress through the stages depends on multiple factors, including level of formal education, family background, and length of time spent in contact with the language. All these steps are achieved in the field of the Total Physical Response strategy: in the TPR language programmes, Asher provided from ten to twenty hours of pure listening activities paired with body movements before students tried to produce speech. Nevertheless, this pre-learning listening understanding period with the use of imperatives and commands could possibly accelerate the progress of the student in a traditional language programme (Sutherland, 1978). In fact, the steps used by TPR strengthen and give emphasis to the preproduction stage mentioned by Krashen and Terrell but at the end of the programme learners can also achieve the advanced fluency stage because:

Listening skill is far in advance of speaking. For instance, it is common young children who are not yet able to produce more than one-word yet they demonstrate perfect understanding when an adult says, "Pick up truck and bring it to me". [...] We infer from these observations that accident that listening precedes speaking. It may be that listening comprehension maps the blueprint for the future acquisition (Sutherland, 1978, p. 204).

In this way, through the means of the Total Physical Response, foreign language production becomes a natural and spontaneous event as it occurs in the native language, which makes it an effective FL learning method, especially for students with dyslexia also because they are not forced to use language following a strict regime.

Another feature of TPR is that activities which operate on the right hemisphere of the brain do not undergo evaluation: this explains why students during TPR instructions use other skills unconsciously without commenting on them when doing activities that rely on the use of this part of our mind, and that learners are actually thinking in the target language without being aware (Asher, 2009). Traditional language classes focus on the left hemisphere of the brain instead, which is dedicated to language, while TPR lessons activate the right hemisphere being non-verbal, adventurous, creative and also impulsive. Therefore, also for biological reasons this method is more adequate and effective for learners with dyslexia.

2.3 The value of movement games in MSL and TPR

Games do not pass through the cognitive way but through the sensory path and they increase the pleasure of the foreign language learning experience. Through this type of activity, people can see themselves from another perspective and they can also discover new personal aspects, which would not be discovered through a cognitive and dialogical-verbal dimension. Therefore, according to Caon, Battaglia and Bricese (2020) the recreational method is a powerful tool when applied to learning, and is based on two concepts, playfulness and game: the former is the vital energy composed by strong motivational drives (emotional, social and affective), which leads to the global development of the person; the latter is used as a strategy to fulfil educational and language aims, part of the language education. Through the game, students are highly motivated and they are responsible for leading their educational journey. Depending on the type of game, this kinaesthetic technique is constituted by the following components:

- *Cognitive*: the elaboration of a gaming strategy and the acquisition of rules.
- *Linguistic*: reading and explaining the rules, the routines such as counting or ritual sentences accompanying some games, and the natural interactions related to the game.
- *Affective*: having fun, the pleasantness and the motivation towards the game.
- *Social*: the team and the group involved in the gaming experience.
- *Motor and psychomotor*: movement, coordination and balance required for the game.
- *Emotional*: fear, tension, happiness and the sense of being without limitations.
- *Cultural*: rules, ways of relating and the routines required to start and end a game are culturally connotated.
- *Transcultural*: the need of having rules which need to be respected (Caon, Battaglia & Bricese, 2020, p. 137).

When movement games are applied to the FL educational setting, they allow and ease language acquisition and learning through a natural and constant practice, and this increases the personal knowledge and competences of students. Moreover, playing creates a sense of commitment which at the same time sparks pleasure and therefore it enhances motivation: as cited by Balboni, when the motivation in the learner is based on pleasure then the learning experience is very incisive because it is internally driven (for further reference on motivation and FL learning see section 3.4.4). This explains how students can learn when playing, what Krashen

identified as “the rule of forgetting”, which enables learning acquisition because students forget that they are actually learning. Moreover, games provide overlearning, repetition and reinforcement of the language elements and most importantly they avoid boredom because they maintain the level of motivation. For the reasons mentioned, this recreational method is very powerful when introduced in the educational setting because it involves the learner/player in an experience in which multiple mental processes are involved and the knowledge passes through language, the visual, kinaesthetic, tactile and auditory channels, and it involves multiple cognitive styles and intelligences. With these aims, games can be used at any age and linguistic competence level fit with the abilities of the learners, and they also help to release the physical energy, which is important especially when referring to children. Nevertheless, games can appear rather puerile especially when performed by adolescents and adults, but these experiences stimulate the need to outdo oneself and to challenge oneself before being a challenge against others instead. The results can be seen not only at the content level, but also at a personal level, enhancing motivation and self-esteem. Therefore, when presenting the gaming experience to adolescents and adults, teachers have to explain the educational and knowledge aims to make it acceptable.

Both MSL instruction and TPR resort to these movement games and physical exercises as a way of stimulating learning through stress-free activities and enhancing motivation. Games for definition are multisensory and they involve the use of the body, activating different and multiple channels different from the cognitive one, which is usually activated in standard school lessons. When movement games are applied in the classroom environment especially during EFL lessons, these techniques part of the Multisensory Approach and the Total Physical Response create a relaxed and pleasant climate and they lead to the total engagement of the student, even though they are not real games; added to this, the student experiences pleasure when performing movement games and this leads to an implicit learning. Consequently, games used in MSL and TPR lead to the total engagement of the student, who learns language notions, vocabulary and grammar implicitly, through practice in a constant and natural way.

2.4 Vocabulary and grammar

In a FL context students can rely on the comparison between their L1 and FL knowledge to have close and tangible links in their minds. However, this process is even more complicated when related to students with dyslexia, who need specific instruction to create established knowledge in the FL because it does not occur naturally. This difficulty is also enhanced by the creation of even more confusion between vocabulary and syntax of L1 and FL when learning a FL (Crombie, 2000). Vocabulary and grammar are the building blocks to which learners rely on while executing oral and written tasks. Although, if attention is focused only on the linguistic aspects of communication (vocabulary, grammar, orthography, etc.) in EFL courses, students with dyslexia are doomed to be considered as lacking foreign language aptitude. But if the general abilities of acquisition are considered, then the strengths of these learners can be seen (Daloiso, 2017). In this section some specific indications on how to process vocabulary and grammar of the foreign language in a student with dyslexia and how to overcome some related obstacles are provided, because the case study described in Chapter IV is based on the development of these skills which will finally foster FL learning and structuring.

2.4.1 Vocabulary

In order to create words and sentences, to understand figurative language features and the mechanisms behind word creations in the foreign language, learners first have to know a good number of words and they must be able to use them in a context. To do so, learners should know how to pronounce words and they should also know the meaning these words have, if not, learners will encounter difficulties when trying to communicate because they have to retrieve the information about the words they need, the way to pronounce them and the meaning they have simultaneously, and this is time- and energy-consuming. However, when referring to students with dyslexia the situation is different: at the beginning of their learning experience the notions of the FL are manageable, however, as soon as the amount of vocabulary items becomes gradually more consistent, then also the demands of the memory increase. In a student with dyslexia the process of vocabulary acquisition overloads memory, leading to confusion and great language related difficulties (Crombie, 1997; Crombie, 2000). To make the process easier, students with dyslexia should be given direct and continuous instruction on phonology in order to tackle this issue and to enhance automatisisation, which is the main difficulty of this category of learners. As a consequence of direct instruction and automatisisation, the students

can master this skill through the enhancement of their phonological awareness, and they are able to activate systematically the processes needed to communicate. After this, learners can pay more attention to other steps required in communication instead of being lost in the first steps of this linguistic activity. Some examples on the techniques used to teach vocabulary have been provided in the previous sections (1.1 and 1.2), but there are also many other strategies: vocabulary can be learnt through the context, through inferencing or thanks to the frequency of the exposition, keeping in mind that in a FL context false friends can be present, and therefore students should be aware of their existence to avoid making mistakes. Students with dyslexia memorise words in a better way if these are collocated in a context and not in isolation, also because these learners have a limited capacity of their working memory, meaning that teachers should not overwhelm students with information about many new words in one lesson. According to the famous quote taken from James Asher (as cited in Coppa, Collerone, Fernando & Giulivi, 2012), “Babies don't learn by memorizing lists; why should children or adults?” and this should be remembered when teaching. In fact, teachers can help memorisation of vocabulary which leads to a benefit to all students, including the ones with special needs. First of all, teachers should teach vocabulary which is motivating for learners, therefore related to their personal interests and needs, and they should provide accessible exercises in order to practice vocabulary: lists of words to be learnt will not have the outcome desired, but they will only increase the frustration and the confusion for students with dyslexia, and the introduction of similar sounding words or words with similar meaning during the same lesson should also be avoided. Another device which should be avoided with students with dyslexia is the introduction of the dictionary: according to Crombie (2000), dictionaries are very difficult to use in case of dyslexia because they require sequencing of letter order and working memory to remember the order of the letters, abilities undermined by this language difference. A useful device is to teach students strategies for memorising words, for example mnemonics, presenting words in groups or also through playful activities, such as word puzzles, memory games and picture-word matching. Nevertheless, to ensure that memorisation is achieved, frequent revision and repetition is needed especially with learners with dyslexia. A powerful method that can be used for vocabulary learning and acquisition is the Total Physical Response, which is very effective for all students and not only to learners with dyslexia.

2.4.2 *Grammar and syntax*

Language is a cultural reflection of our ability of structuring reality both conceptually and categorically speaking, and being able of learning grammar and syntax in a spontaneous or formal context can be problematic for every learner, especially when dealing with dyslexia (Daloiso & Melero Rodríguez, 2017).

When approaching to grammar there are three phases to consider: the first one is the discovery of rules by analysing the language in context; then, rules settle in the mind through structured exercises, which finally enable the ability of reusing these rules when needed. This last phase is the one that students with dyslexia struggle with, especially in the FL environment. When the input is presented first orally and then visually, it is more effective than an exclusively verbal input and when the gestures are combined with the content of verbs, for example, they are better memorised, because there is a link between the personal body experience and language. This process is called embodiment and it is very powerful in the learning experience (Daloiso & Melero Rodríguez, 2017). In EFL classes grammar rules are taught using terminology, which may be too abstract for learners with special needs: categories such as noun, verbs or object may not be clear and teachers at times use inductive explanations to describe some rules, instead of using direct instruction that will help the learning acquisition of these learners. Nonetheless, the analysis and the practice of structures can help learners to overcome some difficulties related to grammar.

Syntax is crucially important for comprehension and its complexity is due to many factors, such as word order, the length of the sentence, prepositional phrases and modifiers and also to the meaning of elements (denotation, connotation or figurative) of a foreign language. As far as word order is concerned, this ability enables people to make reliable predictions about word sequencing, which warn us when elements do not correspond and match our predictions. The awareness of syntax monitors comprehension while listening and reading, ensuring the capacity of understanding if sentences make sense; when decoding errors occur, this phenomenon is not a result of “poor word-attack skills, but [of] poor prediction of appropriate words” (Peavler & Rooney, 2019, p. 276). On the other hand, the student applying self-monitoring and that rereads the sentence correctly shows good comprehension abilities. With reference to sentence length, this factor undermines comprehension and, even when using simple language, the increase of

sentence length can worsen the comprehension ability; sentences can be short, but it is also the level of abstractness that can interfere with comprehension. The other factor considers prepositional phrases and modifiers: when these elements are used in predictable patterns, this predictability factor allows understanding, even when sentences are added in length. On the contrary, when unconventional structures are used, comprehension may be impeded. Finally, meaning is the last factor which may affect comprehension: building semantic knowledge will help and support reading comprehension and written expression of learners. These syntactical factors, which affect FL comprehension, are a constant issue for students with dyslexia because these activities require rapid naming, working memory, processing speed, and the automatic development of skills, abilities affected by dyslexia.

Here some examples of grammar and syntax strategies are presented to help learners with language differences to sustain their FL learning experience: after having introduced the grammatical rule, teachers can ask their students to find and notice the target structure in the context (i.e., in the exercise or in a text that has been read); only at this point, exercises that require minimal writing can be introduced and, when this step has been achieved, exercises with major writing are introduced. Only when the student has achieved an average level of autonomy and interiorisation, free practice can be introduced. Another example is the introduction of multisensory techniques, as seen in the previous sections (see section 1.1), which can help to raise awareness about noun morphology, word order or sentence structure: in this type of approach colour-coding, cards and objects can be used to practice some grammar aspects.

CHAPTER III

Dyslexia

In this section a definition of dyslexia is given, together with a description of the areas affected by this language difference, which are phonological processing, working memory, processing speed, cognitive load and the emotional sphere. Moreover, the focus will be also on the relationship between dyslexia and foreign language teaching, and on the accommodations and modifications which can be applied by teachers to the educational environment to help students with dyslexia to enjoy an inclusive learning experience.

3.1 Definition of dyslexia

Problems related to reading acquisition, to the development of literacy and to language-related skills can be due to a specific learning difference, which can be dyslexia. However, common misconceptions are related to this language difference because it is believed to be a rare disease caused by visual perception problems, not affecting smart people, which can be outgrown and which does not run into families. Moreover, it is believed that individuals with dyslexia cannot perform well in school since they are lazy and so that they should try harder, also because they can be cured or helped through special treatment (Nijakowska, 2019). However, dyslexia is not as rare as it might appear: the International Dyslexia Association estimates that 15-20% of the world citizenry is affected by dyslexia (IDA, 2016) and in Italy the students with dyslexia are 187,693 (Gestione Patrimonio Informativo e Statistica, 2020). The British Dyslexia Association (BDA) gave a definition to this language difference, which is considered for this final dissertation:

Dyslexia is a specific learning difficulty which mainly affects the development of literacy and language-related skills. It is likely to be present at birth and to be lifelong in its effects. It is characterised by difficulties with phonological processing, rapid naming, working memory, processing speed, and the automatic development of skills that may not match up to an individual's other cognitive abilities. It tends to be resistant to conventional teaching methods, but its effects can be mitigated by appropriately specific intervention, including the application of information technology and supportive counselling (British Dyslexia Association, www.bdadyslexia.org.uk).

This definition highlights many key characteristics of dyslexia, such as its neurological origin, the areas affected and the way in which it can be mitigated. At the brain level, studies underlined differences in the brain structure of people with dyslexia: in the 1970s and 1980s Geschwind and Galaburda (as cited in Daloso, 2017) noticed a physical difference in the symmetry of the brain. The left hemisphere of the brain is usually larger than the right hemisphere, but in people with dyslexia the two hemispheres may be completely symmetrical or may have an opposite symmetry, meaning that the right hemisphere is larger than the left one. In relation to this, it must be remembered how the left hemisphere is responsible for language processing, analytical thought, detailed oriented perception, sequencing, planning and logic, while the right hemisphere is non-verbal, random, impulsive, creative and intuitive, giving evidence for the differences at the brain level in these individuals. Nonetheless, there may be present co-morbidities with other learning difficulties, such as dysgraphia, dyspraxia, dysorthographia, dyscalculia, reading comprehension issues, attention deficits and psychoaffective problems; in this case, the learning issue as a whole is superior to the sum of the individual difficulties. Nevertheless, only recently dyslexia has been recognised in school regulations. On 8th October 2010 the Italian law edited the new norms on specific learning disorders to be applied in the scholastic environment; the law recognised the specific learning disorders, which may limit some daily activities, and they can appear in normal cognitive capacities or in absence of neurologic pathologies. The aims of the law are the following:

- a. Grant the right to education.
- b. Favour scholastic success, also through supportive didactic measures, to grant an adequate education and to promote the development of potentialities.
- c. Reduce the relational and emotional discomfort.
- d. Adopt adequate assessment and evaluation strategies according to the educational needs of students.
- e. Prepare teachers and sensitise parents towards the problems related to people with specific learning disorders.
- f. Favour a timely diagnosis and rehabilitation didactical programmes.
- g. Enhance communication and collaboration between family, school and health services during the educational process.
- h. Ensure equal opportunities of development of the professional and social capacities (L. 170/2010).

In the Italian scenery a student with dyslexia does not have the right to be sustained by a support teacher, which may happen if there is a co-morbidity with other pathologies. This means that learners with dyslexia are included in EFL classrooms with little special needs support, sometimes none. Only learners with dyslexia, who have a personal learning plan, can have accommodations or modifications.

3.2 Areas affected by dyslexia

Some of the signs of dyslexia, as mentioned by the BDA, may include difficulty in word recognition, reading fluency, spelling, writing, learning to speak, organising language and activities, memorisation of information, facts, numbers and dates, comprehending reading assignments that are long and learning a foreign language, which have tangible motivations. In relation to these difficulties, it must be also considered a theory devised by Nicolson and Fawcett (as cited in Daloso, 2017), which explains the reason why learners with dyslexia encounter difficulties related to multitasking activities. The Automatization Deficit Hypothesis describes the challenge of making some procedures automatically, especially for people with dyslexia, because a person needs to master a capacity before being able to make it automatic; as a consequence of automatisisation, a person can do an activity without concentrating too much on the procedures needed to complete it. When relating the Automatization Deficit Hypothesis to a person with dyslexia, it explains why these learners encounter difficulties in reading, writing, spelling and other activities, such as counting down or rapid naming, because these activities are a result of multiple abilities and actions that come together while executing them. Specifically related to language learning, Kormos and Kontra (2008, as cited in Kormos, 2012) observed how students with dyslexia do not have only writing and spelling issues but difficulties can be encountered also in other domains: even though these skills are affected majorly, the scholars observed how also reading acquisition, listening skills, vocabulary and grammatical knowledge are highly affected by dyslexia. These areas are all part of the abilities required in L1 and FL language learning and they all require common mechanisms, which are affected in a person with dyslexia. This section provides an explanation of the cognitive and the psychological mechanisms required for language learning, but that are negatively affected by dyslexia, explaining the origins of the linguistic issues of these learners.

3.2.1 *Phonological processing, working memory and processing speed*

The main areas affected in a person with dyslexia are phonological processing, working memory and processing speed. The research of Fazio et al. (2021) observed how students with reading difficulties obtained worse results for phonological awareness and working memory compared to students with typical development due to memory, which influences accuracy in language related skills, explaining the issues these learners encountered when studying a FL.

As far as phonological processing is concerned, this ability enables people to produce, recall, store and hear different speech sounds in a quick and correct way and it is at the basis of phonological analysis. This area is related to the reading ability, because it enables people to use the skills such as syllable division, identification of different sounds and recognition of rhyming words when reading; when these abilities are observed in a reader with dyslexia it can be seen how the reading process can be slow and imprecise and how the reader can distinguish with difficulty the difference between specific sounds or to follow what people are saying when they are speaking quickly.

The other area affected by dyslexia is working memory. Memory is a function of the brain that enables humans to store, maintain and retrieve information and there are many types of memory; the ones needed for reading acquisition are implicit memory, explicit memory and working memory. Implicit memory is the most archaic form of memory that people possess because it is used from birth to learn sequences of movement, procedures and patterns, which may be unconscious because they can be done without thinking. The second type of memory mentioned is explicit memory, which is the opposite of the implicit memory: explicit memory helps people to voluntarily memorise information because there is direct instruction of what to learn. Finally, working memory is a stadium of transition, which has a limited capacity usually from six to eight items: the input lingers for a short period of time in the working memory before moving to the long-term memory. In this way, through working memory information can be processed and used in a second moment when needed. When applying these types of memory to the reading acquisition area, they enable readers to focus on secondary elements when reading (implicit memory), to explicitly learn orthographic patterns (explicit memory) and to analyse sounds, letters, syllables and words before reading them (working memory). Dyslexia affects this area and, when learning a FL, the demands of memory increase as the

amount of vocabulary to be learnt increases, which can lead to memory overload and to subsequent difficulty and confusion (Crombie, 1997). Nevertheless, articulatory rehearsal can refresh the phonological traces and there are also devising strategies that help people to memorise information easily.

Finally, the third area that is affected by dyslexia is processing speed. This cognitive ability is the time needed for a person to do a mental task, therefore it is related to the speed of reaction between receiving and responding to a stimulus; processing speed is not related to intelligence whether being it slow or poor, because its nature is also determined by the task undertaken. On the other hand, this cognitive ability is related to automaticity, i.e., the ability to process information quickly and implicitly: people with dyslexia struggle to make some skills automatic, which means that they find it difficult to do more skills contemporary or to perform tasks needing fast answers, as mentioned in the Automatization Deficit Hypothesis. Nonetheless, automaticity is not only related to language but also to motor coordination skills, explaining the clumsiness, the disorganisation and the difficulties in visual orientation of people with dyslexia. Consequently, dyslexia undermines reading and writing skills, and also the spoken and listening areas (Crombie, 1997), in fact phonological awareness, good working memory and rapid processing are all skills which are linked to processing speed required in language activities. On the other hand, the explanation gives evidence to the fact that dyslexia is not reconnected to poor comprehension, but to poor decoding abilities, which may compromise the comprehension ability of these learners. For instance, people with dyslexia do not have original impediments at the comprehension level, but it may be affected when the language related skills do not allow learners to achieve decoding.

3.2.2 *Cognitive load*

As far as the cognitive load is concerned, this element is the quantity of mental effort used in our working memory when performing a task; this load increases when a student with dyslexia is attending FL classes because numerous abilities are activated, also simultaneously, and they require an excessive cognitive load, such as real-time foreign language processing, multitasking and reliance on previous knowledge (Daloiso, 2017). Activities that require a great amount of cognitive load are reading aloud, taking dictation, copying from the board and taking notes. These activities do not enhance the FL abilities of a student with dyslexia and they do not prove their knowledge; on the other hand, when doing these activities, learners with dyslexia

concentrate on the abilities and processes required for completing them and therefore they do not concentrate on the language. Negative consequences at the emotional level may arise, such as frustration and anxiety.

3.2.3 *Emotional sphere*

Additionally, emotional feelings are implicated when addressing to dyslexia, for example the psychological profile of a person with dyslexia may be affected by this learning difference. Poor self-esteem, anxiety, fragile motivation and depression are just some of the behavioural components which may change in a person with dyslexia. One of the first researchers to describe the emotional aspects related to dyslexia was Samuel T. Orton, who observed a mismatch between reading instructions given in the school environment and the learning needs of the student; also Jerome J. Shultz explains through his DE-STRESS model how:

Many individuals with dyslexia have experienced years of frustration and limited success, despite countless hours spent in special programs or working with specialists. Their progress may have been agonizingly slow and frustrating, rendering them emotionally fragile and vulnerable. Some have been subjected to excessive pressure to succeed (or excel) without the proper support or training. Others have been continuously compared to siblings, classmates, or co-workers, making them embarrassed, cautious, and defensive. Individuals with dyslexia may have learned that being in the company of others places them at risk for making public mistakes and the inevitable negative reactions that may ensue (Shultz, 2013, p. 2).

Moreover, Horwitz et al. (1986) posited the existence of a linguistic anxiety, which is different from the situational and behavioural anxiety (as cited in Daloso, 2017). This type of anxiety is related to situational anxiety, meaning that it appears in a specific situation, even if all the attitudes, emotions, beliefs and self-perceptions derive from linguistic learning, which is negatively affected by dyslexia.

3.3 Relationship between L1 and FL

In an article written by Margaret Crombie the idea of promoting foreign language learning for everybody was followed by a question which was “if it is really possible to give all our young

people access to this area of the curriculum [and] how” (n.d., p. 1). In order to answer these questions, aspects such as the relationship between L1 and FL, the features of the FL, and the accommodations and modifications, concerning techniques, classroom environment and teaching strategies of the FL should be considered. All these factors determine the competence level in the foreign language helping these learners to face and to overcome some of their difficulties. In this section specific reference is made to English as a foreign language.

According to Helland and Kaasa (2005, p. 42) “the transition from L1 to L2 should be especially challenging” for individuals with dyslexia also because, according to Crombie (1997; 2000) and Kormos (2012) the learning ability of a foreign language is based on the abilities possessed in the mother language; therefore, possible difficulties related to the mother tongue can be transferred to the foreign language. In most cases, students with language differences encounter and experience distinctive difficulties concerning especially the construction of their mother tongue, which defines weaknesses in all language related tasks being L1 or FL. Moreover, since FL learning is introduced since the first years of primary school in many cases, “many dyslexic pupils may have to learn a European language before they reach a fair level of competency in their own language” (Crombie, 2000, p. 114): this phenomenon can undermine the competence of both L1 and FL, especially for the foreign language because it requires more time to process information than the one required in the L1, which is always more in the case of dyslexia. Usually, not-at-risk learners can rely on the use of the language transfer using the knowledge in the mother tongue and generalise it to the needs and the knowledge of the foreign language; on the other hand, at-risk students cannot rely on this device and this leads to harsh language learning process.

Moreover, considering the linguistic sphere of language learning in relation to dyslexia, there are many issues faced by this type of language learner in the FL learning process, which are poor organisational skills, auditory discrimination, self-esteem and working memory, weaknesses in phonological processing and in auditory sequencing, confusion over syntax, difficulties with automatisisation and with motor skills, slow information processing, limited attention span, difficulties in object naming and lower aptitude towards the foreign language. For instance, the success or the failure in FL learning depends also on these linguistic abilities: the Linguistic Coding Differences Hypothesis (LCDH) devised by Ganschow, Sparks and Javorsky (1998, as cited in Crombie, 2000; Schneider & Evers, 2009) observed how poor

readers and writers and at-risk language learners have first of all problems at the structural level of the FL learnt and not at the semantical level, meaning that the areas affected are syntax, phonology and orthography and not comprehension. As a consequence, if there are issues in one language component, then there will be negative effects also on other components, both at the L1 and the FL level. These aspects are to be remembered when thinking about the relationship between L1 and FL because they are directly related and not separate, as observed from the research of Crombie (1997). Likewise, in the 1980s Cummins underlined how the level of success in a foreign language depends on the knowledge possessed in the mother tongue: the Linguistic Interdependence Hypothesis (1979, as cited in Schneider & Evers, 2009) is a powerful relationship influencing positively or negatively the performance in the FL.

3.4 Features of the language learnt

Having considered the relationship between L1 and FL, there are other factors to consider concerning the features of the FL. The level of competence in FL competes to achieve successful linguistic goals but also to create and underline linguistic weaknesses: this depends on many factors, such as the age of the person who is learning a foreign language and the timing of this learning experience, the exposition to the language, the type of language studied and its language systems (phonological, grammar, and syntactic systems) and motivation.

3.4.1 The plasticity and variability of the brain

Learning a foreign language is regulated by variables and actions at the brain level. The plasticity and the variability of the brain are modulated by the age of FL acquisition, which influence the efficacy and the endurance of the language learning experience in the mind. Learning a FL shows best results when acquired at a younger age because at this stage of life new brain connections are created: this means that the older the person learning a foreign language is, the slower and less stable the linguistic trace is because the brain creates less connections at this stage of life. Moreover, when a FL is learnt at an early stage, learners use one neutral language system for L1 and FL; contrary, in older FL learners it is more likely that two separate language systems are used, making FL learning less efficient (Schneider & Evers, 2009). However, people with dyslexia have a biological difference at the brain level, resulting in issues concerning automatization, memory retrieval, issues with working memory and slow

information processing to mention some, which concur in making the FL learning process more challenging compared to language learners with no language differences. However, when learning is achieved through multisensory interactions, acquisition becomes more efficient also for this category of learners: this is possible due to the multisensory feature of the brain, which follows a multisensory processing of sensory information. In fact, discoveries in the field have highlighted how modulations, activations and connectivity at the earliest stages of perceptual processing are multisensory and that there are some brain areas which are sensory specific (Shams & Seitz, 2008).

3.4.2 *The FL exposition*

Then, the exposure level between L1 and FL changes also for practical reasons: the mother tongue is acquired through natural and continuous exposure to the language; on the other hand, FL is learnt during a specific set of time during school hours. Moreover, the learner needs the mother tongue to communicate in everyday situations, whereas FL is used only in the classroom environment and it is also evaluated, which can also lead to linguistic anxiety as mentioned in section 3.2.3. Including Gardner et al. (1987) described what they called “Second Language Attrition”, which is another factor contributing to FL learning: this phenomenon leads to a gradual loss of the linguistic competence achieved in the FL and it influences both the storage of information and the stability of the memory trail of language related knowledge when language is not used by the learner, which is also due to time dedication towards the language. Nevertheless, since these cognitive abilities are already undermined in a learner with dyslexia, who has difficulty in storing information and in creating an established memory trail, also in this case FL learning for students with dyslexia is even more difficult.

3.4.3 *Features of the FL*

Another factor that concurs in the efficacy of the FL learning experience is the feature of the language studied, for which the European policy is also considered. In order to ensure that an unbearable burden is not imposed on learners especially with linguistic differences, the decision concerning the foreign language to study may consider these aspects:

- Linguistic similarity between L1 and FL, which may also concern alphabetic correspondence.

- Orthographic depth, which is the degree of deviation and correspondence between one-to-one phoneme-letter correspondence. Following this definition, languages fall into two categories depending on how transparent or opaque the writing system of the language is, and they are shallow and deep orthographies. Figure 1 represents the ranking of European languages according to this feature, going from the easiest languages to learn on the left, moving to the most difficult ones on the right.

Figure 1 – *Classification of European languages according to their orthographic depth (Mcclung & Pearson, 2019)*

Syllabic complexity	Orthographic depth				
	Shallow	→ → → → →			Deep
Simple	Finnish	Greek	Portuguese	French	
		Italian			
		Spanish			
Complex		German	Dutch	Danish	English
		Norwegian	Swedish		
		Icelandic			

This means that the intensity and the signs of dyslexia depend also on the nature of the orthographic system of the language spoken/learnt and it may vary across the languages studied by an individual. According to the definitions stated above, a learner with dyslexia may have language-related issues (i.e., slow reading pace, impaired spelling or phonological processing) if the language has a deep orthography, but if the two languages have common features from the linguistic point of view, then the learning experience is easier for learners with dyslexia. For example, if Spanish and Italian are compared, these two languages share similarities in their writing and pronunciation system: for this reason, an Italian student with and without dyslexia, who has to learn Spanish, is eased in the learning process; contrary, when comparing Italian to English, these two languages have two different phoneme-letter correspondence, meaning that Italian students will encounter difficulties when learning this language, especially if they have language related issues. Therefore, a student with dyslexia may encounter even more obstacles when learning languages with an opaque writing system and negative consequences such as failure, demotivation and behavioural problems can arise. As a consequence of the orthographical depth of a FL, the foreign language systems (i.e., phonological, grammar, and

syntactic systems) are consequently affected in the language learning process. The first difference encountered when approaching a FL is in the sound of the new language: learners have to learn a new system of sounds, also because some are not present in their mother tongue. Considering Italian as L1 and English as FL, the sound represented graphically by “th”, pronounced as /ð/ (*this*) or /θ/ (*thing*), is not present in the Italian phonological system, therefore, students encounter great difficulties when trying to pronounce this sound; usually it is substituted by the sounds /t/, /f/ or /d/ because they are present in the Italian phonological system and these sounds are close to the original outputs. Then, the second feature standing out for learners when encountering a FL for the first time is the correspondence and similarity between L1 and FL grammar, syntax and vocabulary. It is very common for mother tongue students to compare the knowledge taught in a L1 grammar lesson to the language they use every day in order to retrieve explanations and to have real examples to compare; on the other hand, when approaching to a FL students cannot rely on previous knowledge, and grammar rules are taught using abstract terminology and at times also in an inductive way. To overcome this obstacle, students usually compare the two grammar systems in order to have a close and tangible relationship. This generalisation can be used also to compare the syntactical structure of the FL language or its vocabulary: when comparing English to Italian, Italian learners can notice some similarities at the syntactical level, for example the SVO word order in affirmative and negative sentences; however, this expectancy is not matched when the English interrogative form is compared to the Italian form because it is the opposite as for the position of adjectives which precedes the noun, contrary to what happens in Italian (grammar and vocabulary have been analysed in depth in section 2.4). However, these features are grasped with difficulties by learners with dyslexia, who cannot always generalise a rule and the L1 trace is not completely defined. Also in the teaching of foreign languages section of the Italian law L. 170/2010 the focus is on the transparency of the FL studied, which in the case of a specific learning disorder a language with a shallow orthography instead of a deep one should be preferred.

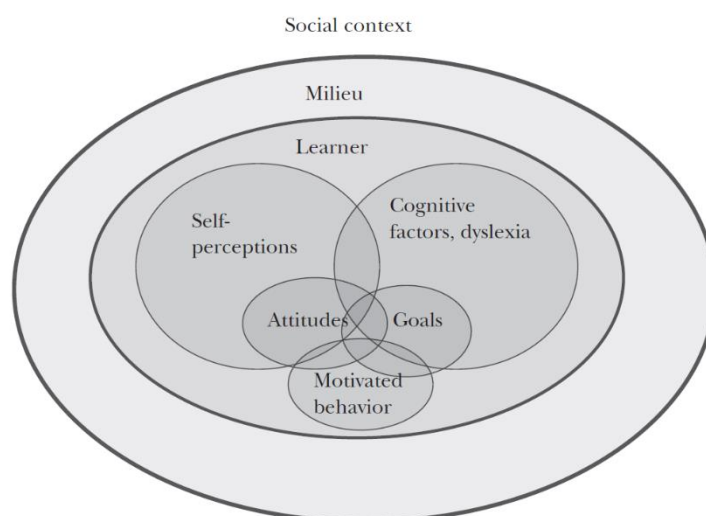
3.4.4 *FL motivation*

Finally, FL motivation is another factor that contributes to create an effective or a negative learning experience, which can help language-learning anxiety and self-confidence. Studying a FL can help all pupils to enhance their personal and educational experience, also in their native language: some of the advantages of learning a FL are that it can improve motivation and

cognitive learning, open access towards another culture, enhance understanding of the L1, help concentration, be a self-generating process and generate personal confidence (Crombie, 1997; Crombie, 2000). Consequently, learning a FL should be as appealing as possible for students; nevertheless, this educational experience can also enhance the sense of failure in students, especially when they have been very engaged and when they have put effort in their FL learning experience, but at the end the expectations are not met with the actual outcome of the experience. This fraction between what Dörnyei defined as the ideal L2 self, ought-to L2 self and the actual self leads to emotional and behavioural problems which can affect the whole educational experience and not only the foreign language experience: this attitude is due to the fact that learners have educational aims to achieve, which are reached through the attributes they think of having. However, the learning experience does not always have the results expected also because the learning experience is a factor that must be considered because of its variability (2005, as cited in Csizér, Kormos & Sarkadi, 2010). This explains the reason for the teacher to know the self-perception and the goals of the student to give the most appropriate direction and to guide the student through the learning experience. The introduction of a FL in the educational path of a student with dyslexia should enhance the personal success and not destroy the personal confidence because it should guide learners to achieve more educational and language goals. However, teaching methods and styles, the materials used, the classroom environment, family and friends, the perceived competence, the issues deriving from dyslexia, the goals, and the attitude towards oneself and towards the learning experience are only some of the possible variables that can affect the learning experience of a student, variables which are fundamental to consider in the case of a student with dyslexia who is struggling with the FL learning experience. However, it is very common for students with or without learning differences to struggle with motivation, because it is not automatically part of their essence: according to FL studies on motivation, this process can either be extrinsic or intrinsic, meaning that it is found in the person or the individual needs to find it elsewhere. Moreover, from 1994 Balboni (as cited in Daloso, 2017) developed a study on motivation: considering the previous research done in the field, his research explains how motivation is built on a triangular structure in which pleasure is placed at the top, because it is the most powerful, while duty and need are at the base of the triangle. Both duty and need last in a short-term because motivation lies on an objective to achieve, which might be either scholastic or working achievements; on the other hand, motivation based on pleasure is the most powerful because internally driven, meaning

that it is located in the person. According to the research developed by Granschow, Sparks and Javorsky (1998, as cited by Crombie, 2000), attitude and motivational issues are the *result* of FL learning difficulties and not a cause, especially when the first issues are encountered in L1: at this point the teacher has to help students with dyslexia to maintain and sustain self-esteem and motivation not only because they can have a positive or a negative impact in the learning experience of a student but also because motivation is “the dynamic characteristic that influences the effort and persistence that an individual invests into language learning process” (Csizér, Kormos & Sarkadi, 2010, p. 473), which can contribute to the personal and the educational success. Figure 2 represents all the factors that concur in the personal motivation of a student as it has been described above (Csizér, Kormos & Sarkadi, 2010, p. 481).

Figure 2 – *Representation of the motivational system in a learner (Csizér, Kormos & Sarkadi, 2010)*



3.5 Accommodations and modifications to the FL learning setting

Students with dyslexia face numerous difficulties during their language learning experience, which can be extended also to other areas of learning. Accommodations and modifications help especially learners with special needs to face their difficulties and to increase their potential and self-awareness, therefore they have both educational and emotional relevance. These devices work effectively when all students experience satisfaction about their learning experience, although this aim is achieved only if teachers know the abilities of their students and if they

have a specific aim for them to achieve: only at this point, suitable activities are produced and students benefit from these interventions (Crombie, 2000). As explained by Dalouis, the Language Teaching Accessibility Theory (LTAT) helps teachers to “identify potential barriers to learning and to design accessible learning environments for students with dyslexia” (2017, p. 65) also because the goal of the LTAT is of creating a learning environment which is inclusive through the introduction of adequate support. Teachers should analyse whether in their teaching strategies some interventions should be introduced or if their methodologies require reconsideration to ensure a higher level of accessibility of their teaching approach. Sometimes exempting students with language differences from learning a FL or doing some activities when not required impedes learners to have the possibility of participating or learning: this impediment can be seen negatively especially if the peers of these learners find useful studying the FL and especially if the activity can increase the possibilities of learning a language related skill (Crombie, 2000). Therefore, the application of an appropriate teaching methodology and knowing the students allow all learners to achieve the best learning experience possible, and has positive outcomes also concerning motivation; still unfair advantage or unrealistic expectations or goals will not benefit the student under any circumstance.

Modifications remodel activities which are usually assigned to all the classroom, allowing students with learning differences to practice the same topic but with different goals. The rearrangements that enhance the performance of students are related to the response format: instead of writing an answer to an open question, the student can underline the answer in the text, select an answer in multiple choice task or choose a true or false response. Also, extra space to complete a task helps these learners to insert their answers in the most appropriate way and also by handing the student a simplified version of the activity, which does not mean simpler, but more achievable. Flexible work times to complete tasks may also allow students to give evidence of the actual knowledge they possess: if students with dyslexia require more time to process instruction in their mother tongue, then they will also need time in their FL lesson. Therefore, the modification of assignments helps students with this profile to complete the tasks given, without feeling different from their peers or overwhelmed by their weaknesses.

On the other hand, accommodations are adjustments that can be introduced in the learning environment involving materials and interactive instructions, such as extra time to complete a

task or a test, or for processing information and for thinking; help with taking notes, which can be enhanced by giving the student a worksheet with the notes of the lesson but with some missing information and the student needs to complete it while listening; prefer listening over reading activities, in which the student has to listen to a text, either read by a peer or listened to from an audio track, instead of having to read it; give a reading activity beforehand so that the student can practice reading; using assistive technology, such as word processing computer programmes, electronic readers/dictionaries/spellers and audio books, which are also considered to be compensatory tools; slower the speaking pace of the foreign language presentation, especially at the first stages of the FL learning experience; and change evaluation format, content, time and administration of the tests, without changing the final goals because tests should be valid and fair for all the students in the class (for a deeper analysis of the accommodations and modification to assessment and evaluation see Daloiso, 2017; Daloiso & Melero Rodríguez, 2017). Allowing additional practice, maintaining daily routines and emphasising daily review to connect new information to prior knowledge are accommodations that foster the learning process of these learners.

Nevertheless, in this section attention is given to the foreign language and the accommodations and the modifications that can be applied to these lessons to make them more inclusive for these learners, which are lesson planning, instructions, layout of the activity, teaching support, and classroom environment. The Multisensory Approach and the Total Physical Response implement part of these accommodations and modifications to the FL learning experience for students with dyslexia and therefore they enable an inclusive learning experience.

3.5.1 *Lesson planning*

When teachers show students a plan of the lesson, learners feel less overwhelmed by the possible activities that could be done and they manage to focus their attention on the learning goals and steps achieved during the lesson. Teachers can follow the following three different strategies, which can be implemented in their planning:

- *Lesson previews*: a roadmap of the steps, goals and topics that are covered in the lesson can be an important tool that teachers can use to accommodate students with learning differences.

- *Structured lesson models*: the presentation-practice-production (PPP) model is another device that teachers can use to structure their lesson models for teaching units, so that learners are always aware of the aims of the activities.
- *Metacognitive reviews*: the final metacognitive phase is very important because in this way students can review the goals achieved throughout the lesson, helping them to understand whether they have achieved the knowledge required (Daloiso, 2017).

3.5.2 *Instructions*

Important accommodations and modifications are to be related to instructions. Students need to understand the instructions of a task in order to complete it and to practice their skills in all subjects; when approaching a task, a student with dyslexia encounters the first difficulty in the instruction. Teachers can intervene by clarifying and simplifying the instructions using different strategies: one of the simplifications that can be used is the subdivision of the direction in sub steps and highlighting the significant parts of the instructions, so that the student can focus on one element at a time. Another simplification which benefits the student is to use explicit teaching procedures and not inductive ones: this means that when presenting a grammar rule, the teacher should give direct instructions and explanations about the rule analysed and not recur to a series of abstract steps that will lead to its final definition. This aspect was underlined also by Schneider and Evers (2008) and by Crombie (2000), because learners with dyslexia benefit from an explicit processing of language concepts. Moreover, repeating the instructions more than once and asking the students to repeat them in their own words, either to a peer or directly to the teacher, help to make the assignment clearer or also by seeing the same topic but under different perspectives. This is a spiral teaching approach that ensures lessons to be more accessible for learners with dyslexia because they are highly structured, also because this teaching approach follows sequential and cumulative steps; it should be assured that a teaching point has been learned before moving to a new one, following the natural acquisition of elements going from simple to difficult.

3.5.3 *Layout of the activity*

Instructions play a fundamental role in the comprehension of the activities students need to achieve. Nevertheless, the second difficulty that students with learning differences may encounter are related to the layout of the foreign language activity: adjustments to the layout

can lower the visual stress experienced by some learners with dyslexia by enhancing text legibility and readability. Activities can be modified and arranged in a way that allow students to complete them by following simple devices: the font type can be adjusted by using a large wide plain sans serif font, which can be Arial, Tahoma, Verdana or also Open Dyslexic and also the background should be of a pastel colour instead of being all white. The text should be also in a single column and divided into paragraphs, adding headings so that each portion can be specifically analysed, and learners can have an overview of what they are going to read before starting with the activity. Also the combination of verbal and visual information, such as images, graphs, timelines, maps and tables, can enhance the understanding of the learning experience of these learners. The presentation of a small number of assignments at a time and the use of bold and colour to highlight some parts of the text are also helpful strategies.

3.5.4 *Teaching support*

In the school panorama teachers can help these students by making numerous adjustments to offer an accessible FL learning experience. Teachers may help their students to discover the strengths and the abilities they have, or how to overcome a specific situation, increasing the awareness of the capacities of the learner; for instance, feedback plays a fundamental role in determining the level of motivation, also because students with dyslexia usually underestimate their capacities and they attribute their success to luck and not to their abilities. Consequently, motivation is a powerful tool that needs to be protected, sustained and fostered. Scholastic failures can undermine motivation and therefore teachers should sustain it so that the student can appreciate a successful learning experience: the adequate support is given also through the introduction of different techniques that teachers can employ in their teaching method. Usually, students with dyslexia benefit from highly structured multisensory teaching programmes because learning is developed progressively and in a balanced manner: moreover, input is provided by a higher number of channels to maximise the chances that a student with dyslexia can achieve a successful learning. On the other hand, when teachers prefer avoiding writing and rely on audiolingual methods, this preference can create more difficulties to the learner with dyslexia because the input is limited to some sensory channels, excluding the visual and kinaesthetic ones which could benefit the learner instead (Crombie, 1997). Therefore, teachers can help learners in their learning experience by modifying some aspects related to their performance, methods and techniques.

Teachers themselves can contribute to an enhancement of the learning experience of learners with dyslexia through their performance, but they must be aware of how to support these students in the best way. They can affect the learning experience positively but also negatively, which can influence the aptitude of students towards FL learning. In order to enhance comprehension, the first step that teachers can take is to slower their speaking rate, then they can also repeat an utterance, using simple grammatical structures and expressions known by students. Other ways to adjust the performance of teachers is to stress keywords using voice and gestures and use body language to stress information, such as pointing to the lips or to the mouth to underline how to pronounce specific sounds or words, or also by exaggerating mouth movements; it should be avoided the presentation of topics through indirect instruction and prefer direct explanations because they help the learning acquisition of these learners being visual and global thinkers. These factors have to be remembered when teaching foreign languages, especially to students with dyslexia.

The method and the related techniques used in teaching can increase or diminish the learning process of students. As observed by Kormos (2012) and Csizér, Kormos and Sarkadi (2010), the research gave evidence that the methods employed by teachers can affect the attitude of learners, especially if these students have learning differences: for this reason, teachers should be aware of what are the best accommodations for their students in order to help them in their learning experience and it is fundamental that a “wide range of motivational strategies be used in teaching dyslexic students because these learners need to expend considerable effort, be persistent, and spend more time with language learning in their academic and private lives than do non-dyslexic learners. Teachers should also create learning situations and use language teaching materials that enable dyslexic students to experience success” (Csizér, Kormos & Sarkadi, 2010, p. 484). Some learning methods and techniques have been specifically designed to help students with learning differences to enhance their learning possibilities, as seen in the first sections dedicated to MSL instruction and TPR, because they rely on frequent review and repetition, which are simple but effective ways to make the learning experience more inclusive. Some other adjustments that can be inserted in the teaching method of teachers may be the introduction of playful activities. Games are an excellent device to learn a language, also because every culture has games; when used for educational purposes, learners use the language as the mean and not as the purpose for communicative situations that may not have immediate relevance for their learning experience. As a consequence, this context, even if it is artificial, it

reduces the affective filter and it fosters language acquisition, especially for students with dyslexia (see section 1.3).

3.5.5 *Classroom environment*

The classroom environment plays a fundamental role in the emotional state of a learner with dyslexia. The teacher can make this environment more inclusive by raising awareness on diversity, which is part of all classes and learners, starting from their personal learning styles and preferences. For instance, teachers should underline how everyone is different and has several strengths and weaknesses, as for students with dyslexia; to avoid the creation of stigmatisation, activities to raise awareness of dyslexia can be done, so that classmates understand the reason why a learner with no visible impairments should be given a diversified treatment.

CHAPTER IV

Encounter between dyslexia and methodologies

In this chapter the didactical methods of the Multisensory Approach and of the Total Physical Response and dyslexia meet together in the single case study: at this point, the Multisensory Approach and the Total Physical Response fill, sustain and strengthen the gaps students with dyslexia have in the EFL acquisition processing, working both directly and indirectly on those abilities and skills which are affected in a person with dyslexia, focusing specifically on syntax.

4.1 The case study

For this case study all the theories described in the previous chapters are considered. The single case study was a qualitative ethnographic research, which was a programme of fifteen individual tutoring English lessons which lasted five weeks. Four additional weeks were needed for the preparation stage of the case study. The subjects involved were a tutor and an Italian student with a certification of dyslexia, who was attending the third year in middle school; the tutor guided the student throughout the project by following the programme which had been designed specifically for students with dyslexia, who encounter difficulties in the approach towards EFL scholastically, especially concerning sentence structuring, and emotionally. Throughout the programme, sentence structure awareness of the English language was built through the introduction of the Multisensory Approach and the Total Physical Response. These methods were applied equally in the programme, and they sustained the learning process by using multiple and diverse sensory channels simultaneously: this was also possible thanks to the movement games used in these methods, which involved visual, auditory, kinaesthetic and tactile channels, body moments and language, which finally led to language acquisition and learning. The focus of the programme was on the construction of affirmative, negative and interrogative sentences in the present simple, present continuous and past simple tenses and on the creation of a positive and motivational learning environment; even though the student should have been acquainted especially with the first two tenses, this topic was tackled as though the student did not have any knowledge concerning these tenses. This approach was chosen because in this way a student with dyslexia, who often has negative experiences concerning learning EFL and attending its lessons, can start the learning experience again; this meant that all misconceptions and negative experiences could be left aside. Thanks to the

practice of repetition enhanced by the two methods, regularity was built and, when regularity was established in the grammar and in the phonology of EFL, automatisisation allowed the learner to focus his attention on other elements of the language. Consequently, these mechanisms led to a reinforcement of a deeper understanding and comprehension of the English language, resulting in positive outcomes at the educational and emotional level of the student.

The materials concerning the Multisensory Approach followed a set of activities created by an Italian scholar. In her research, Soldi (2019) used the multisensory instruction to explain how to structure a sentence: in her research, colour-coding and cards with different features, such as cards with no coloured edges or cards with coloured edges which represent a grammar category (noun, verb, nominal part) were used to enhance the concept of sentence creation. The student is led to create affirmative, negative and interrogative sentences following sequential steps, which can be achieved intuitively, and at the end of the lesson the student has to compile a self-evaluation map to help the learner understand if the sentence created is correct or not. The technique used by Soldi is highly recursive and every lesson, which focuses on different topics, follows the same structure as the previous lessons, allowing the creation of automatisisation. When this ability is established in the learner, then comprehension is enhanced; on the other hand, when the student has not mastered these abilities then comprehension is undermined. Whereas the activities of the Total Physical Response sections followed the concepts conceived by Asher; nevertheless, the TPR activities had been adapted and re-invented specifically for this case study to fit the features and aims of the participant and of the research. Furthermore, all the activities were highly recursive, because in this way the information was internalised with more efficacy, especially by a learner with dyslexia. In fact, every lesson began with a review of the vocabulary learnt in the previous lessons and it was very useful to follow this revision activity because it unloaded the working memory of the learner, supporting mnemonics.

4.2 Research aims and predictions

The research aim was to verify the application of the Multisensory Approach and of the Total Physical Response to the English foreign language context with learners with dyslexia. When applied to grammar, these methods support learners to learn and to apply the grammar rules

needed to create and structure sentences and these techniques enable students to have a positive learning experience, leading to emotional, motivational and scholastic benefits. Moreover, MSL and TPR help learners to unload working memory, systematise the concepts learnt, create mental associations, automatise the mental activities required to learn, and create autonomy in the fulfilment of tasks; since they stimulate multiple sensory channels simultaneously (visual, audio, kinaesthetic and tactile) and they rely on the creation of associations between the body and the concepts learnt, these methods are used especially for students with Specific Learning Disorders. As a consequence of the application of the methods, the case study had also educational aims: the first purpose from an educational perspective was to support students with dyslexia to learn and to apply the grammar rules needed to create affirmative, negative and interrogative sentences in the present simple, present continuous and past simple tenses to build sentence structure awareness. The second aim was a direct consequence of the first educational objective: enable students with dyslexia, who have had negative experiences concerning EFL learning and also attending EFL courses, to have a positive learning experience, which benefits especially the emotional state of these learners who usually feel very frustrated and inadequate when studying English, with positive outcomes at the motivational level.

4.3 Research method

The following sections describe the elements part of the research method, which are the description of the profile of the participant, the instruments and materials, and the procedure used for the research.

4.3.1 The participant

The participant of this case study was a boy of 13 years old with a certification of dyslexia attending the third year of middle school in the Veneto region in Italy. The student was chosen because he had an official document certifying the diagnosis of dyslexia and had considerable difficulties learning English as a foreign language, both expressed by the student and by the scholastic results. The main difficulties of the participant concerned English grammar and syntax, and he also had emotional distress while attending lessons, doing activities, or when thinking about EFL, which created negative consequences from a scholastic and a psychological point of view. The features of the student were matched with the positive

outcomes resulted from the use of the Multisensory Approach and of the Total Physical Response for students with language differences and FL learning issues. For the reasons mentioned above the tutor selected this student, who gave the approval together with his parents to participate in the research; no compensation was given for the time spent in the research.

In order to have a clear picture of the subject, data was collected from the Likert scale questionnaires, the observation grids, and the meetings with the parents and the teacher. These elements portrayed the features and the profile of the student. The student received a diagnosis of his learning difference before starting his last year in primary school; this official document certified the diagnosis of dyslexia. At the moment of the research, he was attending a charter middle school close to his house, in which more hours of English were done compared to other schools, and he was in class three. For his difficulties encountered in English he started to receive support lessons when he was attending class one, even though he also had problems connected with dyslexia in the majority of subjects studied. The other school subject in which the student had major difficulties was Spanish, even if he managed better because of the different orthographical depth of the language, which he found “similar to Italian”¹, compared to English. Before the case study started, from the first year of middle school the tutor and the student dedicated at least two hours every week to focus on single tutoring English lessons, whereas during school holidays they met even for four hours a week. Concerning English as a foreign language, he did not like his English lessons because as soon as they started he did not understand anything and he felt very frustrated because the teacher often spoke in English from the very beginning of the lesson; as a consequence, the student isolated himself during the lesson and, when he was asked any question in English, the learner was very concerned about his inabilities, starting to feel very anxious and unable to answer. A similar situation can be seen when the student had to do a test: when he reviewed the topics for the test, the student felt pretty ready because according to him he internalised the information, but when the test started, he felt very anxious and he forgot about the notions studied. He had confirmed that when the test started he wanted to finish it as soon as possible and therefore he did not follow any criterion to complete the test, sometimes forgetting to read the indications of the exercises. However, some days the student was more focused on the lesson and on the test and this led to positive

¹ The words reported in brackets are retrieved from the logbook and they were said by the student himself.

responses and results. Nevertheless, the student was very self-concerned about his situation and of being at a lower level compared to his classmates and this became more evident in EFL lessons: this increased the level of uneasiness and discomfort he felt when attending English lessons because they were a proof that he was a loser and unable. He felt more involved when manual, laboratory or group activities were done during these lessons because he could rely on his other abilities and not only the linguistic ones; on the other hand, during grammar lessons he was disoriented and this was reflected also in his notes, which were very confused and little information was noted, even if the teacher wrote the indications on the blackboard. Towards his school situation, the student expressed a desire about it: he wanted to pass his school year with good marks, not excellent but at least sufficient. He did not like getting bad marks, because he saw them as a personal failure and for him they proved that he was not good at anything. For this reason, he blamed himself for not being able to understand. He did not want to fail because he wanted to make his parents proud: nevertheless, his parents did not put pressure on him, but they only spurred him to achieve his goals, according to his abilities. They did not want him to excel or to be the best student in the class, on the contrary they only wanted him to be happy and to be proud of his own capacities. In other school areas he felt very involved. He liked extra school activities especially one which was called *Fablab*: it is a laboratory lesson, in which experiments with technology and activities with wood are performed. He talked about this activity very often, and he was very sad when *Fablab* was postponed. He showed interest towards science, which was his favourite subject, and he was also very fond of his science teacher: he was very curious on how objects are designed and created and their composition. The information cited above was collected in the first observation grid, except for the information retrieved by the parents, which was collected during the meeting.

4.3.2 *Instruments and materials*

For the case study different instruments were used, mainly to collect information about the profile of the student and therefore to create the most adequate learning experience.

The first instrument used was a logbook in which the tutor took notes of the events that occurred throughout the lessons, and of the emotional state of both tutor and student when doing the activities. This instrument was also used to collect information retrieved from the probe questions asked during the semi-structured interview done with the parents and the English

teacher before the beginning of the programme; the information reported by the instrument helped the tutor to complete information in the final steps of the research.

The second instrument used was the programme of the lessons with the topics to be achieved, represented in Appendix C by a road map: this instrument was compiled by the student himself at the end of each topic analysed in the programme. The road map helped the student to make a self-analysis of his learning progress because he had to colour each road sign corresponding to the section completed with one colour among red, yellow or green, which corresponded to *not achieved*, *quite achieved* and *achieved*.

The third instruments were two observation grids (Appendix B) used by the tutor to map the features and to collect information about the student. The grids were compiled in two different moments, at the beginning and at the end of the programme: during the first compilation the tutor considered the information retrieved from the semi-structured interviews and the knowledge achieved through previous encounters with the student, whereas the final compilation had the aim of comparing the results and to verify the changes in the research. The instrument was created for the purposes of this case study, retrieving information from other existing questionnaires. The observation grid provided a general overview of the profile of the learner: the elements analysed concerned attitude, motivation, behaviour, personal feelings, scholastic progress and aptitude, engagement and knowledge concerning English as a foreign language. The instrument was provided with a key of the possible answers, which were *always*, *often*, *sometimes* and *never*: each answer was given by adding a cross in the corresponding section. Furthermore, it was divided into three macro sections: the general section, the language section and the section in which further information could be added. In the first section there were six areas: autonomy, learning processes, affective-relational, memory, behaviour and organisation areas; afterwards, the second section was dedicated to language and it had eight sections: general observations, comprehension, reading, writing, listening, speaking, syntax and grammar. Finally, the third section could be completed with further observations concerning favourite and extra activities and desires of the student, so that the tutor could rely on these aspects when interacting with the student. It must be considered how in this case study tutor and student have known each other for several years, therefore the tutor already had a general overview of the student; in the case in which tutor and student do not know one another, it is recommended that both parents and schoolteachers are interviewed thoroughly by the tutor

before the beginning of the programme in order to discover additional information concerning the student.

The fourth instrument were two Likert scale questionnaires (Appendix A) specifically adapted for this case study used to collect information directly from the participant. The aim of the questionnaire was to collect information from the student in order to become acquainted with the type of approach that the student had with English as a foreign language. This instrument verified if the aptitude of the student towards English language changed by the end of the programme and it stated if the student achieved the knowledge required by comparing the knowledge possessed at the beginning and the one achieved at the end of the programme. Therefore, as for the observation grids, the Likert scale questionnaires were compiled in two different moments, at the beginning and at the end of the programme to verify how and in which degree the approach towards English language and English grammar has changed with the introduction of the Multisensory Approach and the Total Physical Response. It was delivered in Italian with the help of the tutor: in this way, the tutor could accompany the student by reading the text and by giving additional clarifying information about the items when necessary. The questionnaire was provided with a key of the possible answers that the student could give, which were *yes*, *sometimes* and *no*: each answer corresponded to an emoticon because in this way the student with dyslexia can easily relate the answer to a visual image of it. The focus of the questionnaire was related to the approach towards English language (engagement, self-efficacy, English lessons, English teacher, tasks, emotions) and English grammar (reading, writing, speaking, listening, syntax, grammar); the categories related to English grammar are also divided in subcategories. At the end of the questionnaire there was an extra section, in which the student could add additional information related to English and his learning experience. More information was included since the student added more information in many sections to give more evidence for his answers.

Finally, the instruments used for the fulfilment of the programme following the Multisensory Approach and the Total Physical Response were the activities devised by Soldi in *Puzzle English* (2019) or created and adapted especially for this single case study. The book of Soldi provided the activities followed by the student and the tutor throughout the programme, which included interactive materials, such as cards, spinners, a pyramid and a tense helpsheet, and the worksheets needed during the lessons, which were completed and used as a guide. The materials

present in the book were assembled by the tutor and the student at the beginning of the programme and used until the end of the research. On the other hand, the activities concerning the TPR instruction were retrieved and adapted from *The Total Physical Response Approach to Second Language Learning* (Asher, 1969), *Total Physical Response* (Rambe, 2019) and *The Total Physical Response (TPR): Review of the evidence* (Asher, 2009), which were used as a model to design the activities. The miming games, the verb memory game, the activities with the Lego bricks, the game using the slips of paper with the names of verbs similar to *Pictionary*, and *Snap!* were devised especially for the research to sustain the learning process.

The tutor had to provide Lego bricks of different colours, slips of paper with names of verbs on them and the memory game; on the other hand, the student had to bring a booklet and a pencil case.

4.3.3 Procedure

The student and the tutor were doing tutoring lessons to support the EFL learning experience of the boy before the beginning of the research. In order to have a detailed picture of the situation for the case study, it was important to know the perspective and observations of the family, the EFL teacher and also of the personal experience of the student. To achieve this aim different instruments were used. This introductory phase previous to the beginning of the programme lasted four weeks.

Semi-structured interviews were done in presence in which the participants were asked to answer some questions concerning the student. The questions asked were answered freely by the interviewees, who followed the probe questions given: during these meetings the participants were asked whether they gave the consent to answer the questions and whether the information provided could be recorded in a logbook, which would have helped the tutor to order the information in a second moment. The first semi-structured interview was done with the parents of the student in their residence in order to collect additional information to the ones possessed by the tutor and to have their perspective on the situation: this information was useful to understand the point of view of the parents, which consequently helped the tutor to complete the first observation grid especially for the sections C (affective-relational area), E (behaviour) and the one related to the strengths of the learner. The questions asked concerned the personal history of the boy, his learning issues, his strengths, his attitude towards himself and the school

and the wishes they had for him for his future. After the first meeting with the parents, the tutor had a similar semi-structured interview with the English teacher of the learner in the school attended by the student: the same questions concerning the personal history of the boy, his learning issues, his strengths and his aptitude towards school were asked. In addition, more questions related to the kind of approach, test type and the compensatory instruments used by the teacher were then asked. Having a first general information about the student, the first observation grid was completed by the tutor in a secondary moment when the student was not present. The completion of the observation grid helped to design a clear profile of the student; nevertheless, a thorough description of the feelings and attitudes of the student was needed; it should be considered that the tutor and the student already knew each other from previous encounters. To add more information about the student, after the compilation of the observation grid the student together with the tutor completed the Likert scale questionnaire at the residence of the learner after school in the first part of the afternoon: the learner was informed about the questions he was going to answer and before starting with the compilation of the questionnaire, the student was instructed on aims and procedures of the questionnaire, and questions could be asked any time together with the need of taking a break when necessary; after the consent was given, the compilation started and it lasted 40 minutes. In addition, the student was asked to answer the questions honestly since he was not being judged. The decision to complete the questionnaire together was due to the fact that in this way doubts concerning the questions could be solved, examples could be provided and the reading process could be eased. No break was required by the student and many voluntary insertions deriving from the questions were added. Then, the student was informed on the programme that followed the introductory phase.

After this introductory part, the programme following the MSL and TPR methods started. The programme was divided in 15 lessons with three lessons done per week, which meant that the entire programme lasted five weeks. The tutoring lessons were done at the residence of the student. Every lesson lasted one hour, considering working memory capacity and comprehension ability of the student. This means that the length of the lesson may vary according to the capacities and needs of the student, it will be the tutor to ascertain this aspect and to establish the length of the lesson. The student was reminded to ask any question at any time, in this way big or small doubts could be solved instead of dragging them throughout the programme. The lessons were divided as follows:

- Introduction – 2 introductory lessons.
- Present simple – 4 lessons: one lesson for each form (affirmative, negative, interrogative form) and one summary lesson.
- Present continuous – 4 lessons: one lesson for each form (affirmative, negative, interrogative form) and one summary lesson.
- Past simple – 4 lessons one lesson for each form (affirmative, negative, interrogative form) and one summary lesson.
- Conclusion: 1 lesson.

Throughout the programme, the tutor used the logbook to note information, curiosities, feelings, outcomes and the events occurring during the lessons. Moreover, before starting each lesson the tutor asked the student to tell how he was feeling and to describe the activities done during the day, in order to give him the possibility of feeling comfortable before starting the lessons. This moment was fundamental to establish a good relationship with the learner because the way the student felt during the experience was important for the outcome of the research: this moment contributed to the creation of a positive learning environment. Furthermore, a presentation of the activities that would have been achieved during the lesson was provided, according to the presentation-practice-production (PPP) model: this device created expectancy and directed the attention to the notions that would have been learnt. Additionally, learners with dyslexia benefit from this presentation because it reduces the level of anxiety that students with this language differences experience while attending a foreign language lesson because they have an idea of the activities that will be done in the lesson. Each lesson had two different moments: during one part of the lesson, TPR was used to elicit the notion, which could be either present in the memory or not, through a response or a silent acknowledgement; the other part of the lesson was centred on the direct instruction of the topic through methods belonging to the Multisensory Approach.

Also in the summary lessons there were two different moments. At the beginning of the lesson, the tutor introduced the student to the lesson either by miming actions which were presented in the previous lessons, by using a verb memory game or by playing the verb game *Snap!*. In the second part of the lesson, the tutor asked whether the student had any questions about the topics analysed and which activity needed to be practiced more. Then, the tutor asked the student to select the elements needed to create affirmative, negative and interrogative sentences in one of

the three verb tenses: it was important that the student was allowed to consult the materials preferred (e.g., worksheets, booklet, helpsheet), because the aim of this type of lesson was to verify if the notions could be applied to sentence creation, memorisation was not the objective. Afterwards, the tutor selected a subject card and a verb card and gave them to student to create a sentence; the learner chose the agreement cards needed according to the verb card selected by looking at the coloured boxes. Having done this step, the first instruction was to create an affirmative sentence using the elements needed; finally, a negative and an interrogative sentence were created using the help cards needed. All the sentences created during the programme were collected in the booklet of the student, which had different sections, each dedicated to the tense tackled. At the end of every macro topic analysed, the student had to self-evaluate how the learning process had taken place, whether the notions had been understood and assimilated, and if the student could apply the rules in autonomy. Therefore, the tutor gave a road map (Appendix C) that was shown at the beginning of the programme and the student coloured the road sign with one colour among red, yellow or green, which correspond to *not achieved*, *quite achieved* and *achieved*.

At the end of the programme, the tutor compiled the observation grid again to register the improvements of the student after the application of the methods in the programme; afterwards, the student together with the tutor completed the same Likert scale questionnaire compiled at the beginning of the programme to verify the outcome of the learning experience and to verify how his learning experience had changed and improved through the introduction of these methods.

Finally, the data was collected and analysed to complete the final analysis of the research. For the data analysis the semi-structured interviews, the observation grids and the two Likert scale questionnaires were compared, focusing on three elements: the issues at the grammar and syntactical level in the EFL, the academic progress and the psychological development, especially concerning motivation, self-efficacy, emotions and FL aptitude, before and after the application of the MSL and TPR instruction. These elements were analysed with reference to the programme and the application of the methods and their consequent effects in the areas mentioned above. The information not directly linked with the research aims and features were not considered to draw the conclusions linked to the research aims. The data was completed

considering when necessary the logbook used by the tutor to refer to specific situations or events particularly important for the data analysis.

4.4 The programme

4.4.1 *Present Simple*

Lesson 1

Materials used: road map, subject cards, verb cards, agreement cards (only noun and adjective).

Aim: introduce the student to the three basic elements that constitute the sentence structure, which are the subject, the verb, and the nominal part – in this lesson the elements of the nominal group which are analysed are noun and adjective.

This lesson allows students to create a fresh start for their English experience, because, even though the learners have prior knowledge on the topic, most elements are presented as though it is the first time they see them. Notwithstanding, for the personal accomplishment of the student previous knowledge is fundamental because it helps the learner to accomplish the tasks given, underlining the fact that they know more English notions than they think.

At the beginning of the lesson the student is shown a road map, which anticipates the steps that will be done during the lesson, which are subject, verb and nominal part. The method used in this lesson relies on the TPR.

Subjects

All the subject cards are placed on the desk so that the student can see them. The tutor gives the student the following instructions:

SCRIPT – Subject introduction drill	
Tutor	Student
“Get the <i>I</i> card.”	<i>The student gets the card.</i>
“Good. What subject is it? Can you tell me?”	“ <i>I.</i> ”
“Who is <i>I</i> ? Point to <i>I.</i> ”	<i>The student can point to himself or herself, or either points directly to the person drawn on the card.</i>

	“I.”
“This is I. Let’s repeat it together: P”	“I.”

The student should easily recognise the card for two main reasons: first, it is a topic which has been introduced in primary school and it has been repeated every year since; second, the word is written at the bottom of the card. These steps are done for every subject. At first, the structure used to introduce the topic may appear quite simple, rather mechanical to the student, but it allows the learner to rely on a sequential order.

Verbs

All the verb cards are placed on the desk. The student is asked to look at the cards and divide them into two groups, known and unknown cards, making a personal evaluation. The stack of unknown cards is used to learn and practice these words. After this, the activity is presented with a game-like appearance, because both student and tutor are involved in an action game, in which every verb has a corresponding mimed action. The steps are the following:

1. The tutor says the name of the verbs in sequence and mimes them at the same time, and the student has to mime the actions sequentially.
2. The tutor says the name of the verbs in sequence and mimes them at the same time, and the student has to mime the actions sequentially and, eventually, can repeat the words at the same time.
3. The tutor only says the name of the verbs in sequence without miming them, and the student has to guess and do the actions.
4. The tutor only mimes the actions without saying the corresponding words, and the student has to guess the verbs.

If the student does not know the meaning of most of the cards, then only some verbs are introduced, giving priority to the words that are needed for the exercises of the following activities. In this way, the working memory is not overloaded. On the contrary, if the student already knows all the verbs, then the tutor can randomly choose some verbs that can be practiced together as a review.

Adjectives

The adjective activity follows the same steps as the verb activity (see *Verbs*).

Nouns

All the noun cards are placed on the desk. The student is asked to look at the cards and divide them making a personal evaluation into two groups, known and unknown cards. The stack of unknown cards is used to learn and practice these words. After this, the activity is presented with the same game-like appearance as the one presented for the *Verb* and *Adjective* activity, but in this case the tutor and the student decide together which unknown nouns to prioritise and they have to invent the corresponding mimed actions.

At the end of this introduction session, the three stacks of cards of subject, verb and nominal part are placed in front of the student. The tutor asks some questions to raise awareness in the student to see whether the learner has noticed some visual features of these cards, such as the colour of the cards, and the reason is asked. In this way the tutor can introduce the fact that during the programme the student will see how sentence structure follows a specific sequence.

To conclude the session, a road map of the whole macro programme is shown; in this way the student sees the aims to be accomplished by the end of the programme.

Lesson 2

Materials used: worksheets of the lesson, tense spinners 1 and 2, subject spinner, the pyramid of sentence structure, verb cards, subject cards, agreement cards, tense helpsheet.

Aim: create the scaffolding for the following lessons, showing the material needed for the programme to accomplish the tasks and reach the final goals.

The lesson is divided in two different moments. In the first part, a summary of some of the words learnt in the first lesson is done using TPR; in this way, the student with dyslexia can benefit from this initial moment to retrieve the information needed for the lesson, without overloading the working memory and damaging comprehension. In the second part, a hands-on activity is presented, in which the student has to actively complete the tasks presented in the worksheet.

At first, a review of some verbs of the previous lesson is done. The verbs that are presented in the activities of the lesson are *drive, wear, play rugby, listen to, have* and *be*. These verbs are presented following the same four steps used in the previous lesson: listen and look at the actions done by the tutor; listen, look and mime; listen and mime; look and guess the word. Then, the student and the tutor revise all the subjects seen in the previous lesson, following the same steps as seen in Lesson 1 in the section *Subjects*; this activity helps the learner to link a word to a real person, that is chosen by the students themselves. If the student wants to revise more actions because he or she feels engaged with the activity, then three more verbs are chosen by the learner: a new verb introduced in the previous lesson, a known verb, and a verb that is difficult to remember for the student.

When this pre-task of revision is over, the student is given the worksheets of the lesson, with the other materials, which are two spinners of the tenses, the pyramid, the verb cards, the subject cards and the agreement cards needed, and the helpsheet with a summary of the tenses needed throughout the programme. In this part of the activity, it is important to focus the attention on one element at a time; as a result, the student can direct all the attention to the activity that is needed to be done.

Spinners

There are three types of spinners, the spinner with *Present Simple* and *Present Continuous*, and the spinner with *Present Simple*, *Present Continuous* (present and future) and *Past Simple*, and the *Subject* spinner – this spinner is analysed separately in the section *Subject Cards and Spinner*. Here the learner has to complete the spinner in the worksheet with the missing information by comparing it with spinner of the material section; when the first spinner is completed, then also the second spinner can be completed. All of the following activities follow the same steps: compare the materials with the corresponding copied version in the worksheet.

Pyramid

The pyramid is needed to create affirmative, negative and interrogative sentences, and it will be used as a dice: the student has to roll it and the pyramid will tell the student which kind of sentence to create. Like the spinners, the pyramid is shown to the student, who needs to complete the missing elements of the pyramid present in the worksheet.

Subject Cards and Spinner

The subject cards and the spinner with the subjects are shown to the student, who has to complete the worksheet with the missing information.

Verb cards

In the following activities the student gives a closer look at the verb cards, which are the ones that are usually confusing. Awareness building is the main aim of this phase of the lesson, because in the first exercise the student has to describe the quantity and the colour of the squares represented on the verb cards, and say if these squares correspond to nominal group, place or time. These categories may be abstract for some learners, therefore it is better to give some examples using TPR, by showing the action alongside the verb, miming, drawing or by showing real-life objects, when it is necessary the mother tongue can be used. In the second exercise, the student has to take the cards needed for the activity and compare them to the ones present in the worksheet. The learner has to say if the cards can go together or not. This part is very useful because it gives a practical guidance of the previous exercise, showing how certain combinations cannot go together. Finally, in the third exercise concerning verb cards the student has to combine the previous knowledge and apply it to this section, in which the colour of the card is combined to its function: nominal group, place or time.

Tense helpsheet

In this final exercise, the learner compares the tense helpsheet with the corresponding version in the worksheet, and has to find and number the section that is mentioned in the worksheet. Through this activity, the student sees the tenses that will be used during the programme.

Lesson 3

Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (yellow and green edges), tense helpsheet, help card *am/are/is*, three different coloured pencils, booklet.

Aims: create an affirmative sentence in the present simple form using the verb *to be* (condition).

The lesson begins with a summary of the activities done during the previous lesson: questions about use, feature and category of spinners, cards and pyramid can be asked to see whether there are any doubts or uncertainties. Then, the tutor provides a warm-up activity: in the room

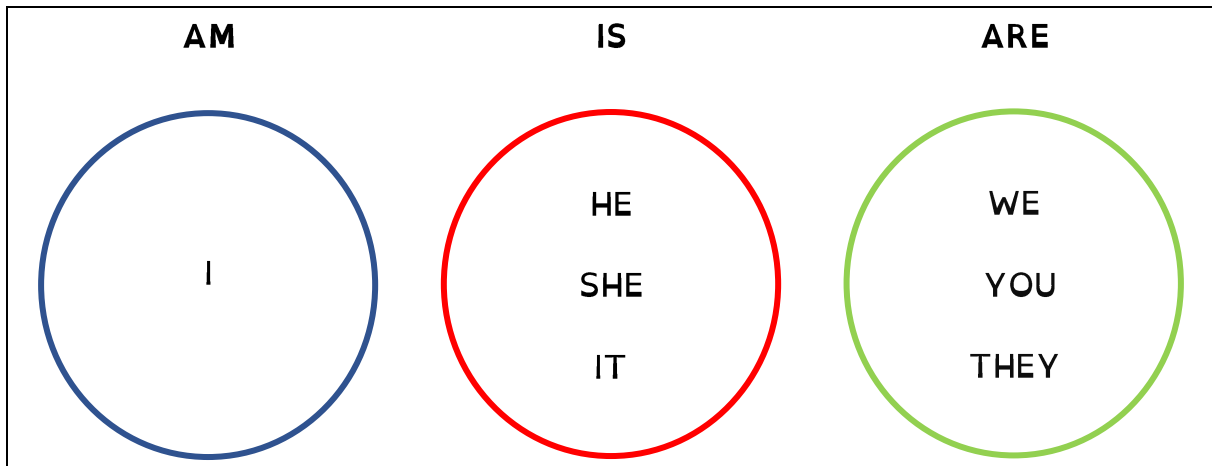
there are different objects, which are needed to create phrases. First, the tutor mimes and says at the same time a series of actions, then the student has to mime the actions while the tutor says the phrases. The sentences could be as follows:

SCRIPT – Pantomime drill	
Tutor	Student
<p><i>The tutor says the actions sequentially and waits for the student to complete the action.</i></p> <ol style="list-style-type: none"> 1. Get your schoolbag. 2. Open your schoolbag. 3. Look inside. 4. Get your pencil case. 5. Open your pencil case. 6. Look for your pen. 7. Get your pen. 8. Get a sheet of paper. 9. Write <i>Hello</i> on the sheet of paper. 10. Put down your pen. 11. Fold the sheet of paper. 12. Give the sheet of paper to me. 	<p><i>The student has to follow the instructions given by the tutor.</i></p>

This activity helps the student to engage with the activity of the lesson, to lower the affective filter and to feel at ease during the activities.

After this first moment, the attention is focused on the construction of the sentence structure of affirmative sentences; although, the student should be aware of the agreement between subject pronouns and the conjunction of the verb *to be*. In order to practice the concurrence between these elements, the learner draws three circles with three different colours in the personal booklet: each colour corresponds to *am*, *is* and *are*. Each circle is then named with these labels. At this point, the student places the subject cards in the correct circle. Thanks to this activity, the visual and sensory channels are involved, helping the student to visualise the subdivision between personal subject and auxiliary, therefore their agreement. As a consequence, the help card *am/are/is* is introduced and the student is aware of the usage and meaning of the card.

Figure 3 – Exemplification of the activity on the agreement between subject pronouns and verb to be



The second part of the lesson is focused on the creation of a sentence following the instructions described in the worksheet. Each activity follows six different steps. In the first step the material is placed on the desk in front of the student, then the cards represented in the worksheets are selected and placed face up and they have to be coloured and completed with the missing information, comparing them to the cards provided. In the third step, the student completes the definition of the type of sentence that is being created, following the instructions given in the helpsheet; afterwards, the student arranges the cards in the order shown in the worksheet, allowing the learner to complete the empty spaces with the information found on the card. The fifth step consists of getting the verb card shown in the first step, which is the verb *to be* and has a yellow box in the right top corner. The student colours the edges of the agreement card with the same colour shown on the verb card: this step underlines agreement between elements in the sentence. Then the student has to place the yellow agreement card in the correct position after the verb; if the activity is clear to the student, then adverbs of frequency can be inserted. The student chooses the agreement card, reads the instructions on the back of the card and places it in the correct place in the sentence. Nevertheless, if the student is still uncertain about how to create an affirmative sentence in the present simple, then this step can be repeated when the student creates another sentence at the end of the lesson. Finally, a self-evaluation mind map is completed. This step allows the student to reflect upon what has been done during the lesson and to verify whether the elements have been interiorised. As a consequence, the student has to write the sentence that has been created in the personal booklet.

Lesson 4

Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (yellow, green and orange edges), tense helpsheet, help card *do/does* and *not*, cards with the letters of the word *not*, booklet.

Aim: create a negative sentence in the present simple form using the verb *to play rugby*.

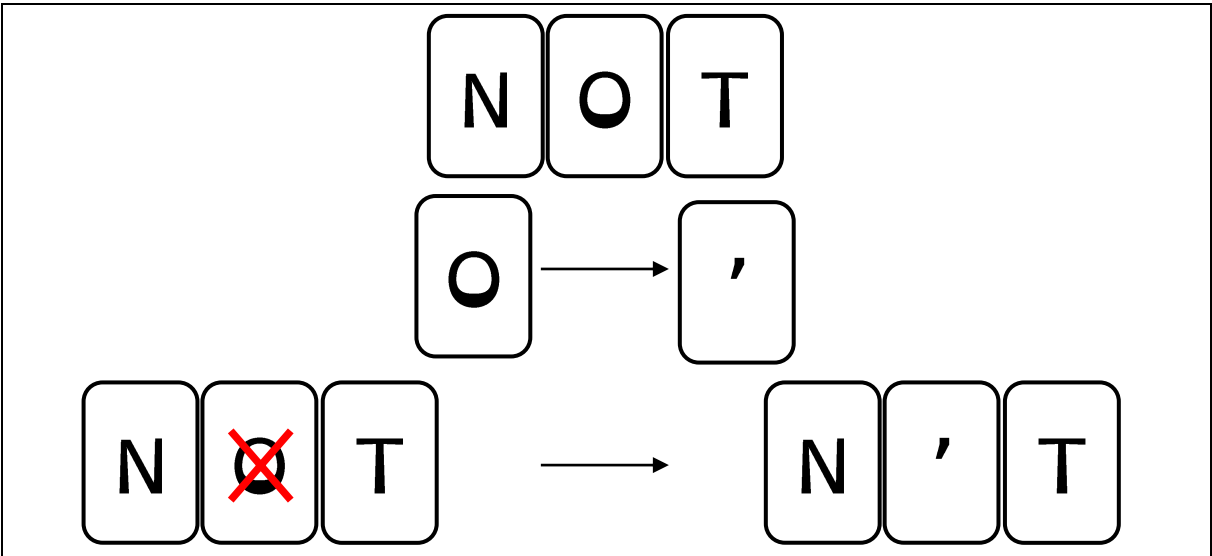
The lesson begins with a summary of the activities done during the previous lesson: questions about use, position, feature and category of cards can be asked to see whether there are any doubts or uncertainties. This lesson begins with the multisensory activity as shown in Soldi (2019).

In the first step the material is placed on the desk in front of the student, then the cards illustrated in the worksheet are selected, placed face up, coloured and completed with the missing information, comparing them to the cards provided a few moments ago. In the third step, the student has to complete a definition of the type of sentence that is being created, following the instructions given in the helpsheet; afterwards, the student has to arrange the cards in the order shown in the worksheet, allowing the learner to complete the empty spaces with the information found on the card. Nevertheless, there are two new elements compared to the previous lesson, which are help cards *do/does* and *not*: the tutor draws the attention of the student to these new elements because they are fundamental for the construction of this type of sentence. The fifth step consists of getting the verb card shown in first step, which is the verb *to play rugby* and has an orange and a green box in the right top corner, and the student has to colour the edges of the agreement cards with the same colours shown in the verb card; this step underlines agreement between elements in the sentence. Then the student places the orange and green agreement cards in the correct position after the verb. Finally, the self-evaluation mind map is completed to reflect upon what has been done during the lesson and to verify whether the elements have been interiorised or not. As a consequence, the student has to write the sentence that has been created in the booklet.

Finally, the tutor ends the lesson with a TPR activity, which focuses on the negation *not*. The cards used to create the sentence of the lesson are kept in position, even though the help card *not* is replaced by three different cards that still create the word *not* – each card has only one letter. Then, the student is asked to isolate the three cards and to put them at the centre of the

desk and another card with an apostrophe is introduced. At this point, the tutor explains that there are two ways of creating a negative sentence: either by adding *not* in the sentence after *do/does*, as shown during the activity, or by attaching the *-n't* element at the end of the auxiliary. Therefore, the *o* of the word *not* is isolated and the tutor says that it is substituted by an apostrophe, showing how the letter still exists but with another identity; the apostrophe changes place with the *o*, but this new element cannot stay alone, it needs to stay attached to another element, which is the verb. All the explanation is accompanied by the card movements that are done by the tutor. After this explanation, the student is asked to do the activity again alone; at the end of the summary, the tutor asks the student to spin the subject spinner, select the appropriate auxiliary between *do/does*, put the *not* cards in the correct position, choose a verb and an agreement card. All the elements are arranged sequentially. At first the sentence is created with the *not* cards, then the student replaces the *o* with the apostrophe and attaches the *-n't* element to the auxiliary.

Figure 4 – Exemplification of the transformation of not into -n't with the cards



SCRIPT – The negation drill	
Tutor	Student
“Let’s take your sentence. How many elements can you see?”	<i>The student counts the cards.</i> “6.”
“Good. Can you replace the <i>not</i> card with the three cards.” <i>The tutor hands the three cards.</i>	<i>The student replaces the card.</i>
“Excellent. What can you see? Can you tell me?”	“ <i>Not.</i> ”
“Is the sentence different?”	“No.”
“Ok. Now isolate the three cards.” <i>The tutor introduces a new card with an apostrophe.</i>	<i>The student isolates the cards.</i>
“Can you change the <i>o</i> with the apostrophe?”	<i>The student changes the position of the cards.</i>
“Look! <i>Not</i> changed into <i>-n’t</i> . What can you read?”	“ <i>-n’t.</i> ”
“Now, let’s go back to the sentence. Let’s put the elements back.” <i>The tutor helps the student by putting the cards in the correct position.</i>	
“But <i>-n’t</i> can’t stay alone! We have to put it next to <i>do/does</i> . Let’s put them together.”	<i>The student has to attach -n’t to do/does.</i>
“ <i>They don’t play rugby in the park on Sundays.</i> Let’s repeat.” <i>The tutor and the student repeat together the sentence.</i>	“ <i>They don’t play rugby in the park on Sundays.</i> ”

Lesson 5

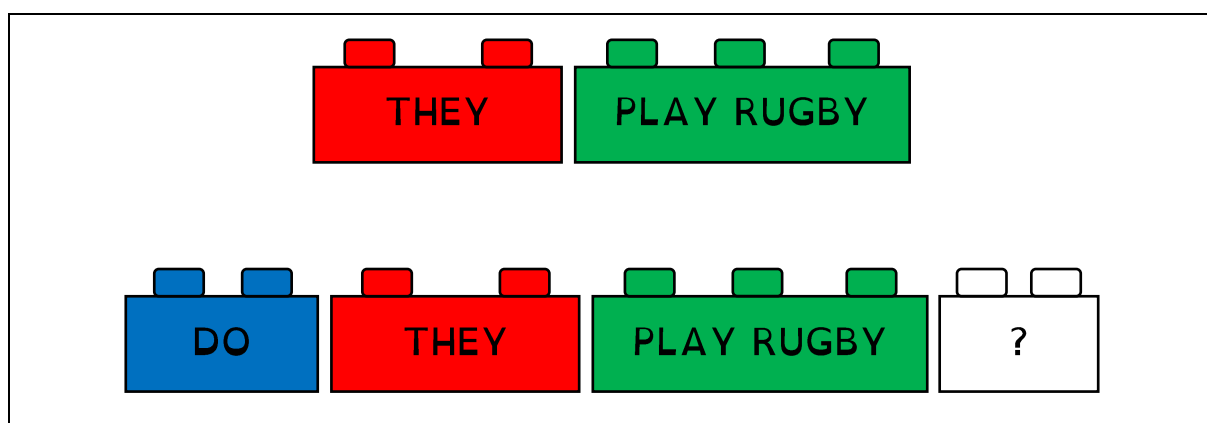
Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (orange edges), tense helpsheet, help card *do/does* and *?*, Lego bricks, booklet.

Aim: create an interrogative sentence in the present simple form using the verb *to play rugby*.

The lesson begins with a summary of the activities done during the previous lesson: questions about use, position, feature and category of cards can be asked to see whether there are any doubts or uncertainties.

At first, the student is given two Lego bricks: a red brick with the word *they* and a green one with the words *play rugby* written on a piece of sellotape. The learner is asked to put the bricks in the correct position, in order to create a sentence. Then, four other Lego bricks are introduced: a blue brick with the word *do*, a red one with *they* written on it, a green brick with *play rugby*, and a white brick with a question mark on it. At this point the tutor asks the student if he or she wants to try and create a sentence with these new bricks, or whether he or she prefers that the tutor does it instead. Having positioned the bricks, the tutor puts the sentences near and asks if the learner can see anything that needs to be noticed or not. The student should see how *they* and *play rugby* have maintained the same colour and position and that *do* and the question mark have been added. At this point the tutor can anticipate that this structure will be used in the activity of the day, so that the student can rely on anticipation. The sentences are left aside because they are needed in the following activity.

Figure 5 – Exemplification of the sentence structure in the present simple using Lego bricks



As for lesson 3 and 4, the student is provided with the worksheets that are needed in the lesson and the lesson follows six steps. In the first step the material is placed on the desk in front of the student, then the cards represented in the worksheets are selected by the student and placed face up and they have to be coloured and completed with the missing information, comparing

them to the cards selected. In the third step, the student has to complete a definition of the type of sentence that is being created (i.e., the interrogative sentence in the present simple form), following the instructions given in the helpsheet. Afterwards, the student arranges the cards in the order shown in the worksheet and completes the empty spaces with the information found on the cards. It should be noticed how the help card *do/does* is present also in this type of sentence and how a new element is inserted, which is the question mark: the tutor recalls how these elements are the same as the ones seen in the first part of the lesson. In the fifth step the verb card of the first step (*to play rugby*) is taken and the student has to colour the edges of the agreement card of the worksheet with the same colour. Although, unlike the previous lessons, this kind of sentence needs only one agreement card, therefore only the agreement card with orange edges is selected and placed in the sentence. Finally, the learner has to complete the self-evaluation mind map to reflect upon the notions of the lesson and to verify whether the elements have been interiorised or not. As a consequence, the student has to write the sentence that has been created in the booklet.

Lesson 6

Materials used: worksheets of the lesson, road map, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (yellow, green and orange edges), tense helpsheet, help card *do/does, not* and *?*, booklet.

Aim: practice the three sentence structures acquired and verify interiorisation of knowledge.

Before starting with the summary lesson, the verbs introduced in the previous lessons and six other verbs are pantomimed. At first, the tutor says the name of the verbs in sequence and mimes them at the same time and the student has to mime the actions sequentially and, if wanted, can repeat the words at the same time; then, the tutor only says the words without miming them, and the student has to mime the actions; and finally the tutor only mimes the actions without saying the corresponding words, and the student has to guess the verbs. The six verbs are selected by the student among the ones written on the cards following a criterion: two known verbs, two new verbs, and two verbs that are difficult to remember for the student. Then the summary activity is presented.

This is the first summary activity of the programme and therefore the tutor asks whether the student has any questions about the topics analysed and which activity he or she wants to practice more. Then, the tutor places the material analysed in the previous lessons and asks the student to select the elements needed to create affirmative, negative and interrogative sentences: it is important that the student is allowed to consult the materials preferred (e.g., worksheets, booklet, helpsheet), because the aim of this lesson is to verify if the notions can be applied, not learnt verbatim. Afterwards, the tutor selects a subject card and a verb card and gives them to the student to create a sentence; the learner chooses the agreement cards needed according to the verb card selected. Having done this step, the first instruction is to create an affirmative sentence using the elements needed; then, a negative sentence is created and finally an interrogative sentence using the help cards needed (i.e., *do/does, not, ?*). Finally, the sentences are written in the booklet.

At the end of the lesson, the student has to self-evaluate the learning process: the tutor gives the road map that was shown at the beginning of the programme (Lesson 1). The student has to colour the road sign with one colour among red, yellow or green, which correspond to *not achieved, quite achieved* and *achieved*.

4.4.2 *Present Continuous*

Lesson 7

Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards (white and red edges), subject cards, agreement cards (orange and green edges), tense helpsheet, help card *am/are/is*, booklet.

Aims: create an affirmative sentence in the present continuous form using the verb *to dance*.

The new macro topic is introduced by showing the road map to the student with the aims to be achieved, which are affirmative, negative and interrogative forms of the present continuous tense. Then a pre-task is introduced: the student has to remember and repeat a sequence of actions that the tutor will mime and say at the same time; the verbs used are the ones that are presented in the topic which are *look at, give, buy, write, drink, and dance*. The tutor could follow the order as follows:

SCRIPT – The memory action drill	
Tutor	Student
<i>The tutor mimes and says the actions sequentially and waits for the reply of the student.</i>	<i>The student repeats each action after the tutor.</i>
1. <i>Look at</i>	1. <i>Look at</i>
2. <i>Look at, give</i>	2. <i>Look at, give</i>
3. <i>Look at, give, buy</i>	3. <i>Look at, give, buy</i>
4. <i>Look at, give, buy, write</i>	4. <i>Look at, give, buy, write</i>
5. <i>Look at, give, buy, write, drink</i>	5. <i>Look at, give, buy, write, drink</i>
6. <i>Look at, give, buy, write, drink, and dance</i>	6. <i>Look at, give, buy, write, drink, and dance</i>

Then after this introduction, the student is given the worksheet of the lesson and the stack of action cards with no coloured edges; the tutor asks the student to fish the same cards as the ones shown in the worksheet and to place them in the same position. Then, the focus is brought on the represented cards of the worksheet. The student should notice a visual difference between the two types of cards represented: the cards on the left column have no edges and the ones on the right column have an edge. At this point the student is asked to find the cards with the same

features (i.e., with red edges) in the stack of cards among the materials; when the cards are found, the student has to colour the edges of the cards of the worksheet with the same colour of the cards that have been found and then he or she has to match the verbs of the left column with the correspondent version in the right column. The learner now has to go back to the cards with no coloured edges and has to place the correspondent card with red edges in the right position, following the same steps done a few moments earlier in the worksheet. Instead of matching, the cards are put one next to the other. Visually, it should be noticed that there is a difference between the words written in the two cards, especially for the fact that there is a pattern that is repeated in every red card, which is *-ing* at the end of the verbs.

In the second part of the lesson, the student is asked to follow the instructions in the worksheet, which are divided in six steps, as for the previous activities. At first, the student selects and places face up the cards that are represented in the worksheets, as for the rest of the material needed; in the second step the cards in the worksheet are coloured and completed with the missing information found in the cards selected from the stack. Afterwards, the student has to complete a definition of the type of sentence that is being created, following the instructions given in the helpsheet under the voice present continuous. In the fourth step, the cards are arranged on the desk in the order shown in the worksheet, allowing the learner to complete the empty spaces in the worksheet with the information found on the cards. Nevertheless, compared to the structure used for the affirmative form of the present simple, the cards have different features: except for the subject card, the help card *am, is* and *are* and the verb card with red edges are used. In fact, in the fifth step the student has to get the verb card shown in first step (i.e., the verb *to dance* with blank edges and with orange and green boxes) and select, complete and colour the agreement cards needed. Then, the orange and green agreement cards are placed in the correct position after the help cards. At the end of the procedure, the self-evaluation mind map is completed to verify if the sentence is correct; if so, the sentence is written in the booklet.

Lesson 8

Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards (white and red edges), subject cards, agreement cards (orange and green

edges), tense helpsheet, help card *am/are/is*, booklet, cards with the letters of the word *not*, cards with the auxiliaries *am*, *is* and *are*, cards with subjects.

Aims: create a negative sentence in the present continuous form using the verb *to dance*.

At the beginning of the lesson, the tutor asks the student whether there are any questions or not; then, the worksheet of the lesson is handed.

To introduce the student to the element of the lesson, which is *not*, the tutor asks the learner to get the activity done in Lesson 3 (i.e., the activity with the auxiliary and the coloured circles). The learner is asked to remember the aim of the activity: to do so, the student is handed the subject cards and he or she is asked to put the subject cards in their correct sections. Through this activity, the student remembers agreement between subject and auxiliary, which is fundamental for the present continuous form. Afterwards, the tutor asks the student to put the new subject cards in a column, following this order *I, he, she, it, we, you* and *they*, and to place the correspondent auxiliary next to the subjects. The auxiliary cards are given by the tutor as for the negation cards that compose the word *not* and the apostrophe: at this point, the tutor shows how, with the introduction of the *not* cards, the meaning of the sentence changes, but this element can be placed at the end of every auxiliary. As for Lesson 4, the tutor explains how the negative sentence can be created in two ways: by adding *not* in the sentence after the auxiliary or by attaching the *-n't* element at the end of the auxiliary. Therefore, the *o* of the word *not* is isolated and substituted by an apostrophe, showing how the letter still exists but with another identity; the apostrophe changes place with the *o*, but this new element cannot stay alone, it needs to stay attached to another element, which is the auxiliary. All the explanation is accompanied by the card movements that are done by the tutor. After this explanation, the student is asked to do the activity again alone; at the end of the summary, the tutor asks the student to spin the subject spinner, select the appropriate auxiliary, put the *not* cards in the correct position and choose a verb with the red edges. All the elements are arranged sequentially. At first the sentence is created with the *not* cards, then the student has to replace the *o* with the apostrophe and attach the *-n't* element at the auxiliary.

At first, the material is put on the desk in front of the student, then the cards represented in the worksheets are selected, placed face up, coloured and completed with the missing information according to the information written on the cards. Afterwards, the definition of the type of

sentence of the lesson is completed following the instructions found in the helpsheet. In the fourth step, the student takes the subject card, the verb card with red edges and the help cards needed, as shown in the worksheet; after this step, the learner arranges them in the aforementioned order, completes and colours the cards on the worksheet. At this point, the student should notice how the *-n't* element introduced at the beginning of the lesson is now presented: this element follows the same pattern as seen in the TPR practice. The fifth step consists of taking the verb card shown in the first step, which is the verb *to dance* that has an orange and a green box: the student colours the edges of the agreement cards with the same colours shown in the verb card and places the agreement cards in the correct position after the verb. Finally, the self-evaluation mind map is completed to verify whether the student has any doubts and the student writes the sentence that has been created in the booklet.

Lesson 9

Materials used: worksheets of the lesson, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards (white and red edges), subject cards, agreement cards (green edges), tense helpsheet, help card *am/are/is* and *?*, Lego bricks, booklet.

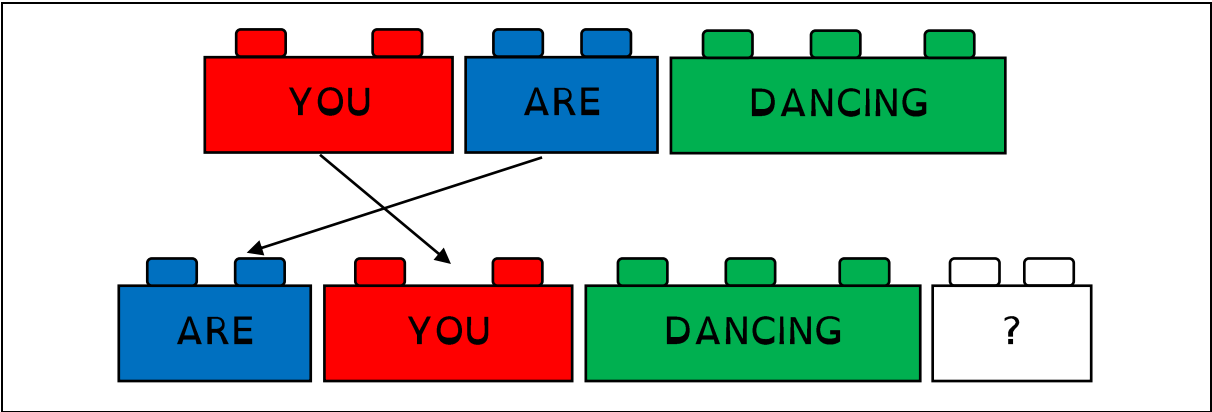
Aims: create an interrogative sentence in the present continuous form using the verb *to dance*.

The lesson begins with a summary of the activities done during the previous lesson: questions about use, position, feature and category of cards can be asked to see whether there are any doubts or uncertainties.

At first, the student is given two Lego bricks: a red brick with the word *you* and a green one with the word *dancing* written on a piece of sellotape. The learner is asked first to find the correct auxiliary among the blue bricks that follows the subject *you* and then has to put the bricks in the correct position, in order to create a sentence. This sentence structure is the same as the one created in Lesson 6: this recurrence of information helps the student to remember and to recall visually and kinaesthetically the base elements to construct the affirmative form of the present continuous form. Then, four other Lego bricks are introduced: a blue brick with the word *are*, a red one with *you* written, a green brick with *dancing*, and a white brick with a question mark on it. At this point the tutor asks the student to try and create an interrogative sentence with these new bricks, or whether he or she prefers that the tutor does it instead. Having

positioned the bricks, the tutor puts the two sentences one over the other and asks if the learner can see anything that needs to be noticed. The student should see how *you* and *are* have changed position, the verb *dancing* has remained *in situ* and the question mark has been added. The sentences are left aside because they are needed in the following activity.

Figure 6 – Exemplification of the sentence structure in the present continuous using Lego bricks



The tutor could give the following instructions to guide the student:

SCRIPT – The Lego bricks sentence structure drill	
Tutor	Student
<i>The tutor shows the student some Lego bricks.</i>	
“Look. How many bricks can you see?”	“Two.”
“Can you read the words on the bricks, please?”	“ <i>You and dancing.</i> ”
“Super! Now choose the correct brick that goes after <i>you.</i> ” <i>The tutor gives the student three bricks with am, is and are written on them. The word after is accompanied by a hand motion.</i>	<i>The student chooses the correct brick.</i>
“Good. Can you put the blue brick in the correct position, please?”	<i>The student puts the brick in the correct position.</i>
“Now read the sentence.”	“ <i>You are dancing.</i> ”
“How many bricks are there? Count.”	“Three.”

“Ok, now create a sentence with these bricks.” <i>The teacher gives four bricks.</i>	<i>The student tries to create a sentence.</i>
“How many bricks are there?”	“Four!”
“And are the bricks in the same position?”	“No”

As for all lessons, the student is provided with the worksheets that are needed in the lesson and the lesson follows six steps. In the first step the material is placed on the desk in front of the student, then the cards represented in the worksheets are selected, placed face up, coloured and completed with the missing information, comparing them to the cards selected. In the third step, the student has to complete a definition of the type of sentence that is being created, following the instructions given in the helpsheet. Afterwards, the student arranges the cards in the order shown in the worksheet and completes the empty spaces with the information found on the cards. It is made evident how the number of the cards is the same as the number of the Lego bricks used at the beginning of the lesson: the cards and the bricks are put one above the other to see visually the correspondence. In the fifth step, the verb card of the first step (*to dance*) is taken and the student has to colour the edges of the agreement card of the worksheet with the same colour. Although, like in Lesson 5 on the interrogative form of the present simple, this kind of sentence needs only one agreement card, therefore only the agreement card with orange edges is selected and placed in the sentence. Finally, the learner completes the self-evaluation mind map and writes the sentence that has been created in the booklet.

At the end of the lesson, if the student wishes, more Lego bricks chosen by the tutor are given so that the learner can handle the elements that compose the interrogative form and can also play with the bricks.

Lesson 10

Materials used: worksheets of the lesson, road map, tense spinner 1, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (green and orange edges), tense helpsheet, help card *am/are/is, not* and *?*, booklet.

Aim: practice the three sentence structures acquired and verify interiorisation of knowledge.

Before starting with the summary lesson, the verbs introduced in the previous lessons and six other verbs are pantomimed. The six verbs are selected by the student among the ones written on the cards following a criterion: two known verbs, two new verbs, and two verbs hard to remember for the student. At first, the tutor says the name of the verbs in sequence and mimes them at the same time, while the student has to mime the actions sequentially and, eventually, can repeat the words at the same time; then, the tutor only says the words without miming them, while the student has to mime the actions; finally, the tutor only mimes the actions without saying the corresponding words and the student has to guess the verbs. Then the summary activity is presented.

At the beginning of the summary activity, the tutor asks whether the student has any questions about the topics analysed and which activity needs to be practiced more. Then, the tutor places the material analysed in the previous lessons and asks the student to select the elements needed to create affirmative, negative and interrogative sentences in the present continuous form: it is important that the student is allowed to consult the preferred materials (e.g., worksheets, booklet, helpsheet) to verify the application of the rules. Afterwards, the tutor selects a subject card and a verb card and gives them to the student to create a sentence: the learner has to choose the agreement cards needed according to the verb card selected. Having done this step, the first instruction is to create an affirmative sentence using the elements needed; then, a negative sentence is created and finally an interrogative sentence using the help cards needed (i.e., *am/are/is, not, ?*). Then the sentences are written in the booklet. If the student prefers, the Lego bricks can be introduced to create the three types of sentences.

At the end of the lesson, the student has to self-evaluate the learning process: the tutor gives the road map that was shown at the beginning of the programme (Lesson 1) and the student has to colour the road sign with one colour among red, yellow or green, which correspond to *not achieved, quite achieved* and *achieved*, as previously done in the first summary lesson of the present simple (Lesson 6).

4.4.3 *Past Simple*

Lesson 11

Materials used: worksheets of the lesson, tense spinner 2, subject spinner, the pyramid of sentence structure, verb cards, subject cards, agreement card (yellow edges), tense helpsheet, verb memory game, booklet, sheets of paper, slips of paper with the name of a verb.

Aim: create an affirmative sentence in the past simple form using the verb *to be* (condition).

The last macro topic is introduced: this should be the most challenging activity for the student, because visual recognition and memorization is asked.

The tutor shows the road map to the student with the aims to be achieved, which are affirmative, negative and interrogative forms of the past simple tense. After this, the pre-task is introduced: the student has to fish a slip of paper from a bag, which contains the name of an action. The student draws the action chosen on a sheet of paper and the tutor guesses the action being drawn; this activity should be a revision for the student because only the verbs that the student knows and the ones learnt are used. At the end of the pre-task, the tutor and the student mime and repeat together the actions presented in the topic which are *be, look at, give, write, drink, and wake up*.

Then after this introduction, the student is given the worksheet of the lesson and the stack of action cards with no coloured edges; the tutor asks the student to fish the same cards as the ones shown in the worksheet and to place them in the same position. Then, the focus is brought on the represented cards of the worksheet. The student, who is now acquainted with the verb cards with red edges used for the present continuous tense, should notice again a visual difference between the two types of cards represented: the cards on the left column have no edges and the ones on the right column have a coloured edge. At this point the student is asked to find the cards with the same features (i.e., with light-blue edges) in the stack of cards among the materials; when the cards are found, the student has to colour the edges of the cards of the worksheet with the same colour of the cards that have been found and then match the verbs of the left column with the correspondent version in the right column. The learner now goes back to the cards with no coloured edges and places the correspondent card with light-blue edges in the right position, following the same steps done a few moments earlier in the worksheet.

Instead of matching them, the cards are put one next to the other. Contrary to what the student could see with the verb cards with red edges, the verbs in the cards with light-blue edges some cards end with *-ed* and other change completely. In order to make these verbs more suitable for the student a new activity is introduced. The student has to complete a verb memory game (Appendix D): each verb has two tiles, a tile with the infinitive form of the verb and a tile of the past form of the verb. The verbs which end in *-ed* in the past form have the same light blue colour, so that the student can focalise this correspondence of some verbs in the past form. The aim of the game is to find the matching pairs among the cards turned face town on the desk. In this first lesson on the past simple, the student works with six verbs that are not the ones used at the beginning of the lesson (i.e., *be, look at, give, write, drink, and wake up*); the number of verbs used should be under six to avoid confusion. The student puts the past tiles near the correct infinitive tile; the tutor reads the verbs out loud, and then the student repeats.

In the second part of the lesson, the student is asked to follow the instructions in the worksheet, which are divided in six steps as for the previous activities. At first, the student selects and puts face up the cards that are represented in the worksheets, as for the rest of the material needed; in the second step, the cards in the worksheet are coloured and completed with the missing information found in the cards selected from the stack. Afterwards, the student completes the definition of the type of sentence created, following the instructions given in the helpsheet under the heading past simple. In the fourth step, the cards are arranged on the desk in the order shown in the worksheet, allowing the learner to complete the empty spaces in the worksheet with the information found on the cards. Nevertheless, compared to the structure used for the affirmative form of the present simple, the verb card has light-blue edges. In the fifth step the student gets the verb card shown in first step, which is the verb *to be* (condition) with blank edges and a yellow box, selects, completes and colours the agreement card needed. Then, the yellow agreement card is put in the correct position after the verb card. At the end of the procedure, the self-evaluation mind map is completed to verify if the sentence is correct and the sentence is written in the booklet.

Lesson 12

Materials used: worksheets of the lesson, tense spinner 2, subject spinner, the pyramid of sentence structure, verb cards, subject cards, agreement card (orange and green edges), tense helpsheet, verb memory game, booklet.

Aim: create a negative sentence in the past simple form using the verb *to wake up*.

The lesson begins with the verb memory game, this time six other different verbs are used. The student has to put the past tiles near the correct infinitive tile; then the tutor reads the verbs out loud, and then the student repeats. To help the student with the interiorization of the verbs, the teacher can tap the pen on the desk rhythmically after each verb is said.

The second part of the lesson focuses on the activities provided in the worksheet. In the first step the material is placed on the desk in front of the student, then the cards represented in the worksheets are selected, put face up, coloured and completed with the missing information, comparing them to the cards. In the third step, the student completes a definition of the negative past simple sentence, following the instructions given in the helpsheet. Afterwards, the student arranges the cards in the order shown in the worksheet, which are subject card, help card *did* and *not* and the verb card *wake up*: the learner completes the empty spaces with the information found on the card and he or she is asked to remember in which tense a similar word to *did* was introduced. If the student does not remember the type of sentence, the tutor can intervene by showing the sentences written in the booklet and then underlining how sentence structure is the same when comparing these tenses. Nevertheless, the verb card *dance* inserted after the help cards *did* and *not* must not be coloured, because with the introduction of the help card *did* the verb returns to its original state. The fifth step consists of getting the verb card *to wake up*, which has an orange and a green box, and the student has to colour the edges of the agreement cards with the same colours shown in the verb card. Then the student places the orange and green agreement cards in the correct position after the verb. Finally, the self-evaluation mind map is completed and the sentence is copied in the booklet.

At the end of the lesson the student and the tutor review the verbs learnt in the previous lesson and in this lesson with the verb memory game.

Lesson 13

Materials used: worksheets of the lesson, tense spinner 2, subject spinner, the pyramid of sentence structure, verb cards, subject cards, agreement card (orange edges), tense helpsheet, verb memory game, booklet.

Aim: create an interrogative sentence in the past simple form using the verb *to wake up*.

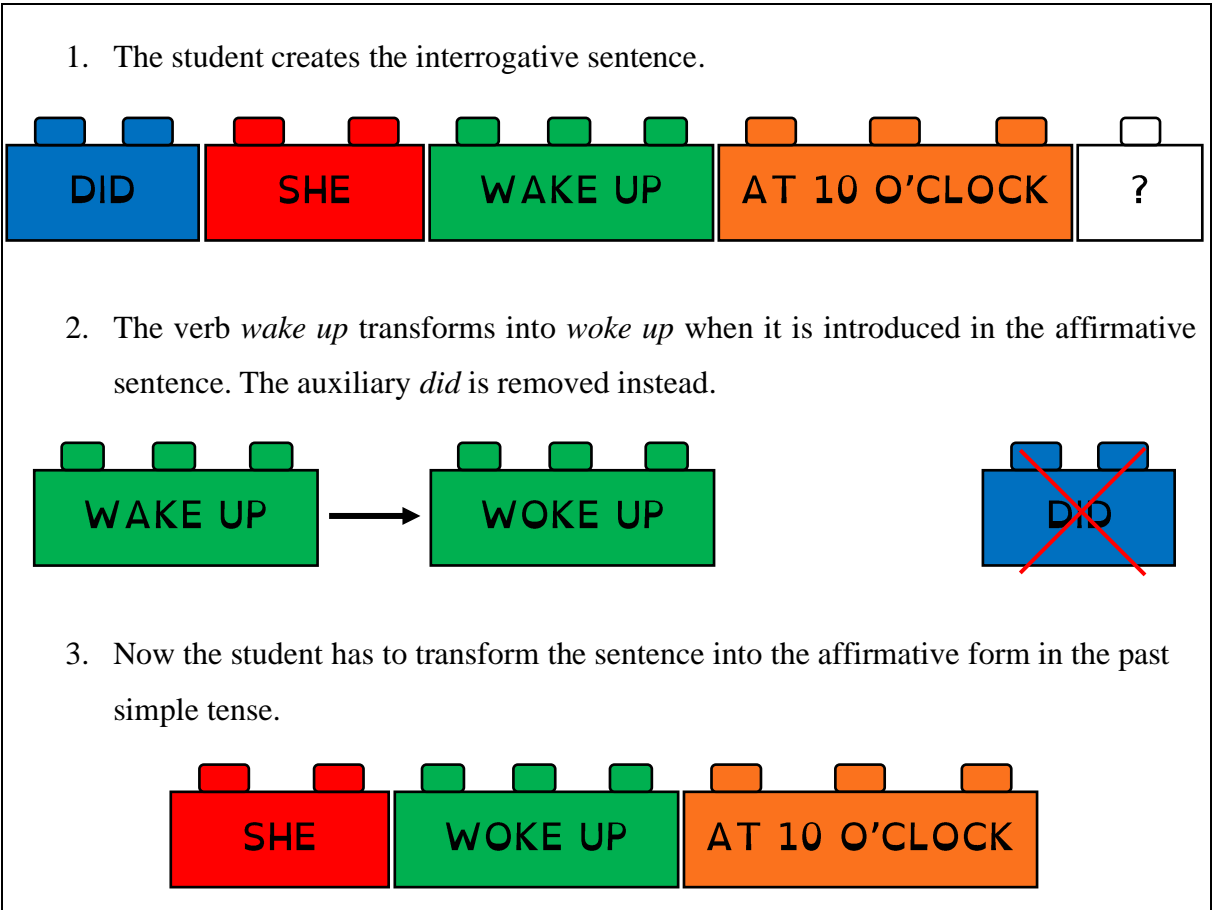
In the first part of the lesson the verb memory game is used to introduce six other different verbs. The student has to put the past tiles near the correct infinitive tile, then the tutor reads the verbs out loud and finally the student repeats. Afterwards, a new activity is introduced, which is the verb game *Snap!*: the verb cards with blank and light-blue edges are shuffled into two card stacks, one for the tutor and one for the student. One stack of cards is placed in front of the player face down and the first card of the pile is fished and placed at the centre of the desk face up: the two players take turns in fishing and putting the first card of the stack of cards at the centre of the desk. When two cards representing the same action in the two tenses (infinitive and past simple form) are found, the player to shout "Snap!" first takes the pile formed by the previous cards placed under the pairs found and adds them to the bottom of their personal stack. The player who accumulates all the cards wins the game. When the student is acquainted with the game, a variant can be introduced: the players have to say the name of the card when they place it at the centre of the desk in the pile.

In the second part of the lesson, the student is provided with the worksheets that are needed in the lesson and the lesson follows six steps. In the first step the cards represented in the worksheets are selected, put face up, coloured and completed with the missing information found on the cards. In the third step, the student has to complete a definition of the interrogative past simple sentence, observing the instructions given in the helpsheet. In the fourth step, the cards are arranged in the order shown in the worksheet and the empty spaces are completed with the information found on the cards. It should be noticed how the help card *did* is present also in this type of sentence and how again the question mark is inserted, like in the previous interrogative sentence structures. Afterwards, the verb card *to wake up* is taken and the student is asked whether the edges have to be coloured, since the element *did* is present in the sentence. Unlike other sentences, the interrogative sentence needs only one agreement card, therefore only the agreement card with orange edges is selected and placed in the sentence. Finally, the

learner completes the self-evaluation mind map and writes the sentence that has been created in the booklet.

To make the sentence clearer, the tutor asks the student to choose the Lego bricks with the same information found in the sentence done, which are a blue brick with the word *did*, a red brick with the word *she*, a green one with the words *wake up*, an orange one with the words *at ten o'clock* and a white brick with a question mark on it written on a piece of sellotape. The learner is asked to put the bricks in the correct position to create the sentence and to transform the sentence into a positive form. At this point the student should remember how the verb for the affirmative sentence, in this case *wake up*, needs to be transformed into *woke up* and that the auxiliary *did* is removed, because the past is already present in the main verb.

Figure 7 – Exemplification of the difference between interrogative and affirmative sentence structure in the past simple using Lego bricks



Lesson 14

Materials used: worksheets of the lesson, road map, tense spinner 2, subject spinner, pyramid of sentence structure, verb cards, subject cards, agreement cards (green and yellow edges), tense helpsheet, help card *did, not* and *?*, booklet.

Aim: practice the three sentence structures acquired and verify interiorisation of knowledge.

Before starting with the summary lesson, the verbs introduced in the previous lessons and other sample verbs are pantomimed. This time, at first the tutor mimes the action of the verb, while the student has to say the corresponding action in the past: this activity is done to verify if the student remembers the correct verb in the past. The verbs that the student does not remember are underlined by the tutor and further practice is done with the verb memory game. At the end of this warm-up activity, the tutor and the student play the verb game *Snap!*. Finally, the summary activity is presented.

The tutor asks whether the student has any questions about the topics analysed and which activity needs to be practiced more, as for the previous summary lessons. Then, the tutor places the material analysed in the previous lessons and asks the student to select the elements needed to create affirmative, negative and interrogative sentences in the past simple form: it is important that the student is allowed to consult the materials preferred (e.g., worksheets, booklet, helpsheet) to verify if the notions can be applied correctly. Afterwards, the tutor selects a subject card and a verb card and gives them to the student to create a sentence; the learner chooses the agreement cards needed according to the verb card selected by looking at the coloured boxes. Having done this step, the first instruction is to create an affirmative sentence using the elements needed; finally, a negative and an interrogative sentence are created using the help cards needed (i.e., *did, not, ?*). Then the sentences are written in the booklet.

At the end of the lesson, the student self-evaluates the learning process: the tutor gives the road map that was shown at the beginning of the programme (Lesson 1) and the student colours the road sign with one colour among red, yellow or green, which correspond to *not achieved, quite achieved* and *achieved*, as previously done in the first summary lessons (Lesson 6 and 10).

Lesson 15

Materials used: worksheets of the previous lessons, tense spinner 1 and 2, subject spinner, the pyramid of sentence structure, verb cards, subject cards, agreement cards (orange, green and yellow edges), tense helpsheet, booklet.

Aim: review all the sentence structures of present simple, present continuous and past simple.

This is the last lesson of the programme, therefore a review of the sentence structures of present simple, present continuous and past simple is made. The student is given almost complete autonomy in the creation of the sentences even if the tutor can intervene when the student makes a mistake by saying to pay attention to the sentence, as described in section 2.2. The student is now able to understand the key elements needed to create a sentence and the order that every sentence needs.

At the beginning of the lesson the student is given the road map given in the first lesson (Appendix C): this step allows the student to see the progress made and the accomplishments achieved. Then, the only instruction given by the tutor is to create one sentence per type of tense and form and to write it in the booklet. To create the sentences the student can use the cards or also the Lego bricks; if there are uncertainties in the use of the correct past verb in the past simple sentence, the student can use the verb memory game first.

CHAPTER V

Results and discussion

This chapter provides and interprets the results of the case study through the instruments and the programme used, giving answers to the research question.

5.1 Results

The results were gathered from the interviews, the comparison between the results of the two observation grids, the comparison of the two Likert scale questionnaires and from the effects produced by the application of the programme.

The outcomes of the interviews and the observation grid compiled at the beginning of the programme all matched the description the student himself provided in the Likert scale questionnaires, highlighting a high emotional component when approaching to English; moreover, the variance of the levels of attention and engagement of the student when completing EFL activities was registered by the parents, the English teacher, the tutor and by the student himself.

The observation grid compiled at the beginning of the programme reported issues in all the domains related to FL abilities, which were relevant with the issues students with dyslexia have concerning both their native and foreign languages. With the application of the methods, the results concerning the areas of affection, syntax and grammar changed between the beginning and end compilation. Table 1 focuses on the areas of the observation grid in which the results between the first and last compilation changed: the observation grid compiled before the beginning of the programme underlined how in the area of syntax issues concerning the correct order of the elements that compose sentences were present, and the grammar area highlighted the difficulties in this EFL domain and the low level of understanding concerning English grammar. The end-of-the-programme compilation registered how the issues in these areas had been overcome, especially in the syntax area in which a higher change of response was developed as a consequence of the acknowledgement the student acquired through the application of the MSL and TPR methods. Furthermore, improvements were registered in the

affective-relational, memory and behaviour area, together with an increase in the positive responses in the language related abilities of writing, listening and speaking.

Table 1 – *Difference between the beginning- and end-of-the programme answers registered by the tutor in the observation grids*

AREA	QUESTIONS	BEGINNING	END
Affective-relational	The student has low self-esteem and lack of confidence in the personal abilities (i.e., <i>I can't do it, It's too difficult for me</i>)	Always	Often
	The learner seems unmotivated	Often	Sometimes
Memory	Verbal tenses and grammar structures are memorised	Sometimes	Often
Behaviour	The student seems distracted, lazy or indolent	Often	Sometimes
	The student devises escape and avoidance mechanisms towards schooling	Often	Sometimes
General observations	The student is intolerant, insecure and clumsy towards English as a school subject	Always	Sometimes
	Activities are organized with difficulty	Often	Sometimes
Writing	Organising a written text is difficult	Always	Often
	Poor developed written texts are produced (i.e., few sentences are written)	Always	Often
Listening	Simple instructions are understood (i.e., <i>listen, repeat, write, speak</i>)	Often	Always
Speaking	The student can start and maintain a conversation with a person	Never	Sometimes
	The student answers with uncertainty to the questions asked	Often	Sometimes
	The oral message can be organised	Never	Sometimes
Syntax	The elements that compose a sentence are recognised (i.e., subject, verb, complement, adverb, adjective)	Sometimes	Often
	The function of the elements that compose a sentence is known	Sometimes	Often
	Affirmative, negative or interrogative sentences are recognised by observing the position of the elements in the sentence	Never	Always
	The focus is on a key element of a sentence that allows to recognise the type of sentence	Sometimes	Often
	The SVO structure is used also in interrogative sentences	Often	Never
	Elements such as auxiliary, regular past participle (-ed) and the progressive form (-ing) are forgotten	Often	Sometimes
	The correct order of elements is confused	Always	Sometimes

	The student is aware that English syntax follows a specific order in the collocation of elements in a sentence	Often	Always
	The Italian syntactic structure is confused with the English one	Always	Sometimes
Grammar	The student has weaknesses in grammar knowledge and competences	Always	Sometimes
	The student remembers grammar structures	Sometimes	Often
	The student applies the new grammar notions to the exercises	Sometimes	Often
	The student understands the indications of grammar exercises	Sometimes	Often
	The student follows with attention and with perseverance the grammar explanation	Sometimes	Often
	The student makes comparisons between Italian and English grammar	Often	Always

Both the beginning and end of the programme Likert scale questionnaires highlighted unvaried issues at the reading, writing, speaking and listening level, consistent with the features of a learner with dyslexia and with the observation collected in the two observation grids. Some improvements were registered at the speaking and at the vocabulary level compared to the situation previous to the beginning of the programme. However, the main differences between the two questionnaires were found in the engagement area, the English lessons area, in the writing-organisation area and in the syntax and grammar areas. Table 2 shows the different answers given by the student between the beginning- and end-of-the programme questionnaires, in which it can be seen how many answers moved from the *yes* and *no* answer to the *sometimes* answer. Moreover, the student also changed the order of preference of the activities related to English language between the beginning and the end of the programme: before the beginning of the programme the order of the activities was the following, reading, speaking, syntax, comprehension, grammar, and listening and writing were collocated at the same level. At the end of the programme the order of the first activities changed: syntax was the most preferred activity, followed by reading, speaking, comprehension, grammar, and listening and writing. Moreover, an increase at the emotional level of the student comparing the beginning and end-of-the programme questionnaires was registered: the engagement, self-efficacy and emotion areas highlighted a positive shift in the answers provided by the student after the application of the method.

Table 2 – *Difference between the beginning- and end-of-the programme answers given by the student in the Likert scale questionnaires*

AREA	QUESTIONS	BEGINNING	END
Engagement	Do you like studying English?	No	Sometimes
	Do you like doing your English homework?	No	Sometimes
	Do you look forward to starting your English lesson?	No	Sometimes
Self-efficacy	Are you good at English grammar?	No	Sometimes
English lessons	Do you understand your English lessons?	No	Sometimes
	Is it difficult to maintain the focus during the English lesson?	Yes	Sometimes
	Do you remember the explanations of the teacher?	No	Sometimes
Emotions	Do you feel insecure when studying English?	Yes	Sometimes
Writing: organisation	Do you have difficulties in formulating sentences in English?	Yes	Sometimes
	Do you get confused when you have to transform a sentence from the affirmative to the negative/interrogative form?	Yes	No
	Do you get confused when you have to transform a sentence from the negative/interrogative form to the affirmative form?	Sometimes	Sometimes
Syntax	Do you know how an English sentence is organised?	Sometimes	Yes
	Can you distinguish the elements that compose a sentence?	Sometimes	Yes
	Do you know how to place subject, verb and object in a sentence?	Sometimes	Yes
	Do you know that there are some features that make us understand the type of sentence we are looking at?	Sometimes	Yes
Grammar	Do you have difficulties in studying English grammar?	Yes	Sometimes
	Is it difficult to remember grammar structures?	Yes	No
	Do you manage to apply the learnt knowledge to exercises?	Sometimes	Yes
	Do you have difficulties in doing grammar exercises?	Yes	Sometimes
	Do you have trouble with understanding a task in a grammar exercise?	Yes	Sometimes
	Do you manage to follow a grammar explanation?	No	Sometimes
	Do you get bored during grammar lessons?	Yes	Sometimes

The programme of lessons was thoroughly followed: the mayor difficulty was encountered in the memorisation of the variation and of the structure of irregular verbs without the *-ed* ending, which was sustained by the activities provided by the programme; contrary, the student enjoyed particularly miming activities, the verb memory game, activities with the Lego bricks and *Snap!* because the request of doing these activities was very frequent, especially at the end of the tutoring lessons. These results were confirmed by the road map completed: the present simple and present continuous road sign were considered as *achieved*, contrary the past simple tense was not mastered as the other tenses, therefore the student retained it to be *quite achieved*. Also the level of curiosity increased: at the beginning of the lessons it was more frequent that the student asked which would have been the activities done in the lesson.

The efficacy of the application of the method was encountered at the scholastic level since the English homework was completed with more easiness and with more autonomy compared to the situation preceding the research. Furthermore, the student was more enthusiastic and pleased when new activities were produced and a significant boost on motivation and EFL aptitude were registered.

The people involved in the case study were available to be asked further questions when needed. The student participated in the case study with perseverance and curiosity.

5.2 Discussion

The research question was “Do the Multisensory Approach and the Total Physical Response allow Italian students with dyslexia to improve the acquisition of English grammar knowledge, specifically the syntactic structure, their aptitude and their scholastic performance?”; through the research and through the single case study the answer to the question was given. The results indicate that the MSL and TPR instruction improve the acquisition of the English grammar knowledge and its syntactical structure when applied to EFL with students with dyslexia because these methods create tangible links among the abstract concepts of grammar with concrete elements; as a consequence, these concepts are easily automatised and learnt and they transform into established long-term concepts, which can be used in autonomy and automatically, achieving the goal of automatisation. Furthermore, also the aptitude and the motivation of the student towards English increased: it was a direct consequence of the

application of the methods because, through this type of instruction, the learner with dyslexia does not need to overload the working memory and therefore lessons are more enjoyable since they become a stress- and judgment-free context. In this way, the student is spurred to try without being afraid of making mistakes, increasing also the self-perception.

The data collected through the observation grids, the Likert scale questionnaires and through the programme support the positive answers to the research question and will be analysed separately in the following sections. These results highlight the ways in which the research question found a positive outcome through the application of the MSL and TPR instruction, achieving educational and emotional development, and awareness in the student with dyslexia. Additionally, the results support the efficacy of the Multisensory Approach and of the Total Physical Response when applied to students with dyslexia, as seen in the existing research in the field: in addition to this, it was underlined their value in the application to the English foreign language context, specifically to EFL grammar and syntax, and their efficacy in the learning experience of a student with dyslexia.

As a consequence of this research, it has been added that these methods are not only effective when applied to the EFL context with learners with dyslexia, but that their uses have positive outcomes on the emotional domain of a person since motivation and self-efficacy are enhanced. This means that the single case study provides a new insight to the relationship between the efficacy of the paired application of the MSL and TPR instruction on EFL syntax and the consequent enhancement of personal motivation, self-efficacy and FL aptitude. However, the research could have added more information about the increase of the motivational area of the student if at the beginning of each lesson the student would have compiled a short questionnaire on the way he felt and on the level of interest towards the lesson. In this way the tutor could have had an even more detailed picture on the matter, which could have helped to draw the final conclusions on motivation; concerning aptitude, to address the involvement of the student towards the English language the MLAT test could have been used at the initial stages of the research so that the tutor could have an additional support on the learning strategy to adopt and to have a detailed picture on the language learning process of the student.

5.2.1 *Highlights from the observation grids*

The observation grid compiled at the beginning of the programme underlined multiple facets of the features of the student, which were sometimes influenced by the attention level that the student had during the tutoring lesson and also by his mood, because there were good and bad days, which made his working pace discontinuous. Usually, negative events, such as bad marks, reproaches, or activities requiring a high level of concentration could reduce the attention span of the student to zero, which also undermined his behaviour negatively; on the other hand, if he was positively supported, his motivation and attention span increased. The areas of the observation grid highlighted the following:

a. *Autonomy area*: the level of difficulty of a task interferes with his performance, which depends also on the level of the attention of the day. Nevertheless, articulate activities are never completed in autonomy because he always needs instructions to organise the procedures to execute the task, otherwise he does not know where to start from, and the assignment has to be repeated often. Finally, tension and frustration are rarely handled because if he has received bad news concerning school during the day, this undermines his patience and especially his self-esteem.

b. *Learning processes area*: organisation, planning, focusing and the application of the new knowledge learnt all depend on the level of the attention of the student; also curiosity is another variable, which can affect the attention span of the learner, which can help to increase attention. Often the student needs more time to accomplish a task because he is slow in processing the steps needed at the beginning of the activity due to lack of automatisation, but, when he understands, he becomes faster; he often needs extra time and frequent pauses, which he often pleads for doing because he feels exhausted. He never manages to ignore distracting sounds: his attention returns to the task the moment the sound stops, otherwise he struggles and cannot complete the tasks. Sometimes activities are done slowly, especially when automatisation is not achieved, and he tires with ease.

c. *Affective-relational area*: sometimes the student has emotional issues, especially when he feels frustrated because of negative marks, and sometimes he does not want to do the tutoring lessons because “they are useless”. This is due to his low self-esteem and lack of confidence, which are always displayed, especially when he receives bad results and before starting a new activity: this is reflected in his attitude, seeming sometimes uninterested and often unmotivated.

Moreover, he never tolerates frustration and he blames himself for being like this and as a consequence he shuts down. Sometimes reproaches are helpful because they spur him, otherwise they are ineffective, and frequently he shows lack of curiosity and interest towards school.

d. *Memory*: sometimes information, notions, rules, structures, sequences, verbal tenses and complex verbal instructions are memorised; the quality of memorisation depends on the level of attention that the student has during the lesson. Usually, he remembers with more efficacy if a notion is associated to a concept present in his mind, otherwise the concept is not internalised and he repeats concepts without knowing the real meaning of them. Moreover, depending on the level of complexity of a text, its parts can be remembered and repeated, but if the text is too difficult or too long then there is no memorisation. Finally, the student often confuses or has difficulty remembering names and dates.

e. *Behaviour*: this section outlined a complex and multifaced profile of this student. The boy is very respectful of the rules, but sometimes he does not want to do an activity and therefore he often devises escape and avoidance mechanisms, especially when he has to do tutoring lessons the days in which he has received bad marks or reproaches at school. This attitude sometimes leads to unexpected crisis of anger, which sometimes are handled, and they are also a result of being unable to bear responsibility: the student knows he has his own responsibilities, but sometimes he feels the pressure of achieving his goals, and this attitude can also result into anxiety episodes, for which he blames his lack of capacities. Moreover, even if the student may seem often distracted and lazy, he is not: this attitude hides his fears of showing his inabilities and weaknesses. The learner attends school regularly, even if sometimes he does not do his homework, especially if he has to do them on his own. He always participates more actively when no writing and reading tasks are given because he feels more involved, especially when manual, playful or group activities are done. However, the student has always difficulty of remaining seated and he always asks to go to the bathroom, or to go and get other material that he has forgotten: for this reason, the tutor and the student have agreed together to have a break after a certain amount of time, depending on the level of attention of the day and the schedule of the activities to be done. Finally, the learner has often low capacities of maintain the focus, which depend on the presence of distractors or on the level of the interest tackled, and he always asks irrelevant questions while he is doing a task, which has no direct link with the activity.

f. *Organisation*: first of all, the timing of the execution of the tasks always varies, going from slow to fast, in fact some days an activity can be accomplished in no time, but the following lesson an activity with same format and on the same topic can be completed in double of the time. This aspect together with the ability of organising an activity and his discontinuous academic performance are influenced by the level of attention of the day. Usually, the organisation of the space of the sheet is managed, depending on the rush he has of accomplishing an activity or if he has understood the explanation, otherwise he is very tidy and wants to create a neat page for his exercises and notes. The same was highlighted in the way he treats his school equipment. As far as page organisation is concerned, every time there is an exercise in the book that has little space to write the answers in an exercise, he asks himself the reason why spaces are so small because “it is impossible to write all the answer in them”.

g. *General observations*: in this section concerning English language it was confirmed how the learner is intolerant and insecure towards EFL, how he often shows difficulties studying English, even if there are some similar difficulties when studying Spanish, and also in organising the activities concerning English language. Sometimes he can complete simple tasks depending on how focused he is, and he can segment, blend and recognise the individual sounds that compose words. However, this depends on the type of word encountered: if he knows the word, if it is memorised and if it is associated to a concept in his mind, then the word can be segmented, blended and recognised.

h. *Comprehension*: better understanding is achieved with graphic texts, concept maps and tables, which he usually asks to create them together because he enjoys choosing the colours of the words, the structure and in this way it is simpler for him to understand concepts, especially concerning verb tenses. As far as general comprehension is concerned, the observation grid highlighted that the length of the information and of the texts undermines his comprehension abilities: it has been noticed how long texts without any type of accommodation or modification are never understood because the student loses track of the train of thoughts and of the focus of the text. This was highlighted also in the reading comprehension items: often if someone else reads for him, comprehension is eased due to the fact that he understands the text better because he does not have to focus on the decoding of the text. Nevertheless, if the text is too long, also in this case the student cannot intake all the information; this happens also when silent reading and therefore only sometimes a better understanding is assured when doing these types of reading activities. However, he often grasps the main information of a message (written or oral),

even if the comprehension and re-elaboration are slow because he needs more time to organise his thoughts.

i. *Reading*: while reading aloud, the student has always little intonation and pitch, skipping comas and full-stops, even if more than once he was given an example on how to read and he was told to stop and change intonation when reaching these punctuation marks. Sometimes he is fluent and reading is done slowly but it is overall correct, and he autocorrects himself when he realises he has done a mistake, even if other times he does not realise that he has done one. Moreover, complex phonological words are decoded if these are memorised and sometimes, he is aware that sounds correspond to letters or to letter combinations, especially if he knows the word, otherwise he cannot always generalise a spelling rule to a letter combination. While he reads, he always has difficulty in keeping still, because he needs to touch something or to move his legs or hands continuously, and he always shows signs of frustration while reading, holding his breath and releasing it when he encounters a word he does not know how to pronounce and stopping multiple times. Even if the student struggles while reading aloud, he always proposes to read out loud, but as soon as he starts, he wants the task to be over in no time, leading to semantic anticipations or to the creation of lexical errors. Finally, the reading activities highlighted how the student has a limited capacity of lexical competence, even if some words are reused during every tutoring lesson, but he can always recognise how to read high frequency lexicon.

j. *Writing*: organising a written text is always difficult for the student because he does not know where to start from and he starts to clutter words and sentences he knows even if they do not fit with the purpose of the task. Therefore, in the process of writing he often encounters difficulties because he has no scheme in the organisation process; although, when he has a scheme to follow, he achieves sufficient results, even autonomously. Nevertheless, the learner produces poor developed written texts, using few sentences, and preferring short sentences composed by subject-verb-object and full stop. While writing, he commits multiple mistakes, even if he has a text to follow as an example, and he has difficulties in the review stage: very often the order of letters and/or number is inverted when writing, sometimes he manages to write complex syllables, even if better results are achieved when he copies the word from an example, and punctuation is used correctly, especially comas and full stops, whereas colon, semicolons and question marks are not used. Moreover, he always forgets to use capital letters

when needed and he always commits few mistakes when copying from the book or from the blackboard, inverting letters, rewriting the same line/word or skipping words or lines.

k. *Listening*: this is the section in which the student has minor difficulties, even if he always gets distracted easily during listening activities, however this type of exercise sometimes is completed without great difficulties. The student often understands simple instructions even though every time he is asked to repeat in his mother tongue what the procedure to follow, even if the indication is pretty clear. To do this type of exercise, the learner needs more time to understand what the audio track/person is saying: to achieve this, the pace is slowed down, and the track is paused and re-listened more than once. He never understands when someone is speaking fast and when in the audio track there is background noise. However, sometimes the learner can focus on the prominent information during the listening task and he panics only when the listening activity requires to write down information at the same time while listening, otherwise he accepts the fact that he did not understand some words.

l. *Speaking*: the student never starts or maintains a conversation without asking any question, because he cannot organise the oral message due to online processing required by this task. Added to this, the learner shows signs of frustration and discomfort when corrected and he blames his inabilities by saying that “he kenw he could not do it”. However, sometimes he interacts with simple and short conversations on themes of personal or everyday interest, usually using automatic answers (e.g., “*How are you?*” “*I’m fine thank you*” even when he is angry). He often gets agitated when English is spoken and he wants the task to be over in no time.

m. *Syntax*: the student is usually aware that English syntax follows a specific order in the collocation of elements in the sentence, he knows that “it is opposite to Italian” especially concerning the order of adjectives. Nonetheless, he still confuses the Italian syntactic structure with the English one, especially when creating interrogative sentences, in which he maintains the SVO word order even after numerous explanations. Sometimes he manages to recognise the elements that compose a sentence and their function, focusing on key elements that allow to recognise the type of sentence; although, he cannot recognise a sentence type (affirmative, negative, interrogative) by observing the position of the elements in the sentence, not even by seeing the question mark of interrogative sentences. Finally, auxiliaries, regular past participle and the progressive form are often forgotten: he can skip the auxiliary, use the *-ing* form without placing the auxiliary where needed in the present continuous tense, or he can use the progressive

form also for the present simple. Even if multiple times these topics have been reviewed and studied together, there has been little improvement.

n. *Grammar*: the learner has weaknesses in grammar knowledge and competences because he struggles to understand the concepts of EFL grammar, and its rules have not been completely interiorised yet. The student always prefers concept maps with essential information to written explanations and he needs examples for each type of sentence to understand grammar rules. Moreover, sometimes the student remembers some grammar structures and applies the new grammar notions to the exercises, but sometimes he does not, even if he follows with attention and with perseverance the grammar explanation and if he understands the indications of grammar exercises. Finally, the learner makes frequent comparisons between Italian and English grammar, noticing “how similar they are”.

At the end of the programme, the main change in the answers was registered in the syntax and grammar areas: the student could often recognise the elements that compose a sentence and he also knew their function; moreover, the participant could often focus on a key element of a sentence which made recognisable the type of sentence and only sometimes the elements of the sentence could be confused, compared to the beginning of the experience. Nevertheless, the main changes which sustained the positive outcome of the application of the methods regarded the syntax area: the affirmative, negative or interrogative sentences could be always recognised by observing the position of the elements in the sentence, the SVO structure was never used also in interrogative sentences because the student was always aware that English syntax follows a specific order in the collocation of elements in a sentence. Also the grammar area underwent great changes: sometimes the student still had weaknesses in grammar knowledge and competences, however the student could often remember grammar structures and apply the new grammar notions to the exercises, in which the indications were understood. With more frequency compared to the period preceding the programme the student followed with attention and with perseverance the grammar explanation and he always made comparisons between Italian and English grammar.

5.2.2 *Highlights of the Likert scale questionnaire*

The Likert scale questionnaire compiled at the beginning of the programme was matched with the explanation of the parents and the results collected from the first observation grid. During

the compilation the student added additional information, even if it was not required because he wanted to give more details.

The first part of the beginning-of-the-programme questionnaire showed the following issues and strengths related to the English language:

a. *Engagement*: the student does not feel engaged in the learning experience with a specific reference to English learning, even though he finds it useful going to school and sometimes he likes going to school. Nevertheless, all language related activities, such as starting a lesson, studying and doing English homework are never appreciated.

b. *Self-efficacy*: when referring to the personal self-efficacy, the student believes that he is not good at writing in English and at English grammar, whereas he thinks that his performance in reading, listening and speaking in English depend on the difficulty required to fulfilling these tasks: if the sentences are simple, or if the speaking pace is slow and clear the student can understand, otherwise he believes that he is not good at these activities. As far as memorisation and vocabulary are concerned, he believes that he knows some words of the English vocabulary and that he can remember rules and procedures if he can recollect this information to a mind map.

c. *English lessons*: the student does not like English lessons because he does “not understand a word of the explanations of the teacher”, which afterwards he does not remember. He claimed how it is difficult to maintain a focus during these lessons and how he needs to take breaks very often.

d. *English teacher*: sometimes he gets on well with the teacher and he asks questions to solve his doubts.

e. *Tasks*: the student confirmed that he can complete simple English tasks alone, but if the activities are difficult or articulated he cannot complete them without asking for help. Nevertheless, he always needs more time than allocated to complete tasks because he can “never finish them on time”.

f. *Emotions*: the learner feels insecure when studying English and he confirmed that he gets frustrated when someone corrects his mistakes; he also gets confused when he tries to remember information. He feels very happy when someone tells him he has done a good job, however this rarely happens, and sometimes he gets angry when he cannot do what he has been asked.

The second part of the questionnaire strictly related to English grammar showed the following.

g. *Reading*: sometimes the student offers to read in English, even if sometimes he prefers silent reading, especially when the text is too long. He always has problems with recognising some words and he gets lost in a long reading, at the end of which he needs to rest. Sometimes for him is easier to read a mind map, depending on how it is structured. He does not read in English for personal pleasure. As far as reading comprehension is concerned, he needs to read a text many times to understand its meaning and sometimes he understands when he reads aloud, if the text is not too long, or when someone else reads for him; however, this activity is affected by the pronunciation and reading pace of the reader. He does not feel afraid when he reads in front of his classmates, even if sometimes he feels embarrassed when he has to read aloud in front of other people. Every time he feels frustrated when reading out loud in English, even though the reading activity does not cause him headaches or anxiety.

h. *Writing*: the student has problems with writing under dictation and when he has to copy something from the board, he gets confused; however, if he has to copy from the book or a notebook it is easier. He always prefers mind maps to written explanations. The major difficulty in writing is found in spelling and organisation: the student has difficulties in writing, memorising, recognising and making sense of some words and he has difficulties in finding mistakes while re-reading his works. He has also issues in finding, planning, organising and writing down his ideas due to difficulties in formulating sentences. This does not happen when he has to write simple sentences or ritual formulas. He has more issues converting a sentence from the negative/interrogative form, instead of the opposite.

i. *Speaking*: he never begins speaking in English, however in circumstances in which he is obliged to (i.e., speaking with native speakers or people from another country) he can start a conversation, even if he has issues when answering questions. The main difficulty is the pronunciation of long words. Sometimes, he gets agitated when he starts speaking, especially if he has not understood, and at times he can feel anxious when speaking in front of his peers because he thinks they are better than him in English, for this reason he can get frustrated when someone corrects his pronunciation. He experiences difficulties in expressing his ideas because he really gets confused when he starts speaking.

j. *Listening*: he gets confused when the teacher talks too fast because he needs time to understand the message told to him. Moreover, he gets distracted during a listening activity also because the background noise influences his comprehension; for these reasons, he finds it

difficult to maintain the focus in a listening activity. He has issues with understanding people, especially if they are native speakers with strong accents, which can affect the understanding of the main information of a message, otherwise he can grasp its general meaning; moreover, he understands simple oral instructions. For the reasons mentioned above, sometimes he prefers listening to others instead of participating in a discussion. Finally, sometimes he can panic when he does not understand a word in a listening activity, but if it is repeated, he does not.

k. *Syntax*: sometimes the student has practiced sentence structuring at school, however he does not recall the information. Depending on the type of sentence, sometimes he knows how an English sentence is organised and he seldom distinguishes the elements in a sentence: he knows the function of a subject, but when referring to verb and object for him is difficult to define them, for this reason he has difficulties in placing these elements in a sentence, when he has to create it. He is aware that there are some features that allow people to distinguish the type of sentence, however he cannot always recall them.

l. *Grammar*: he has difficulties in following grammar explanations and in studying grammar, therefore he gets bored and he has issues in remembering the structures and doing grammar exercises because he cannot understand the task. He can apply the knowledge learnt to exercises if the notions are simple. He finds examples and mind maps helpful to understand grammar and sometimes he can find similarities between Italian and English which help him to understand.

In the questionnaire he added how tests were very stressful for him and how the time given to complete a test was not sufficient. Moreover, the fear concerning tests was of not being able to remember the topics studied, which was actually what happened as soon as the test started: contrary, when the student was at home, he thought that he knew the information, but the learner could not remember anything during testing.

Many answers to the items changed between the first and the last Likert scale questionnaire: some answers changed because they were affected by multiple factors, such as the typology of the activity, the topic and the tasks done during the English lesson. The change was due to the fact that the student had seen how, through adequate instruction on the strategies that could be used in a language lesson, he could complete activities, and focus and enjoy more English lessons. Additionally, the learner explained how his level of attention could still affect his concentration and therefore understanding even after the programme, but when he could apply

the strategies and techniques of the MSL and TPR methods he was more capable of completing activities which required sentence production.

One particular remark should be done for the engagement area, the English lessons area, the emotions area, and for the syntax and grammar areas. In the engagement area the student sometimes started to like studying English, doing homework and looking forward to start the English lesson; before the beginning of the programme these items had a negative response. Concerning self-efficacy, the student started to see himself as being good at English grammar, depending on the topic covered, and how he started to understand, remember and to focus more on the English lessons by the end of the programme. Concerning the emotions area, the student did not always feel insecure while studying English after the programme because he discovered some methods that helped him to complete the activities required for studying, which led to scholastic improvement. This achievement and his self-perception improved his behaviour and his self-esteem, in fact towards the end of the programme he was more willing to do the tutoring lessons and he was very impressed because he understood English notions which were “impossible to understand and to achieve” before the programme started. This new self-awareness changed the way the student perceived EFL, which boosted the aptitude towards this language. The student was then more motivated to do English related activities because he was starting to understand how the language worked. Finally, the most positive results in the Likert scale questionnaire were registered in syntax and grammar: in the former the student achieved the knowledge about the organisation of the English sentence, in which he could distinguish the elements that compose a sentence; furthermore, the learner knew how to place subject, verb and object in a sentence and that there were some features indicating the sentence type which could help him. In the latter the student confirmed how sometimes he had difficulties in studying English grammar, answer that was negative at the beginning of the programme; the student explained how it was not difficult to remember grammar structures, if adequate instruction was provided. This led the student to being able to apply the learnt knowledge to exercises, which sometimes were difficult to complete and to understand. Finally, sometimes he managed to follow a grammar explanation, depending on the topic covered and the level of the attention possessed, variables which could make the grammar lessons boring.

5.2.3 *The programme*

Throughout the programme the student was more willing and enthusiastic towards the syntax related activities: at the beginning, the application of the method required constant guided practice because the student had to understand the mechanisms related to the colour-coded cards and its categories. Nevertheless, by the time the present continuous section was reached the mechanism became more automatic and required less guided instruction. At the beginning the student was reticent and seldom expressed his preferences over the activities: as soon as the student started to become more acquainted with the methods and its strategies, he started to understand and therefore he enjoyed more the activities. In fact throughout the programme the requests of trying to create more sentences than allocated for each tense and its related forms increased, together with the request of doing more games at the end of the tutoring lesson: the student became even enthusiastic of starting the tutoring lessons, especially in the days in which he was happy and he had a good day at school, which happened rarely before the beginning of the programme because it was more frequent that the student asked his parents “to postpone the tutoring lessons since they were useless”. Moreover, he was more secure of his abilities, even though they were still minimal compared to the ones he had to achieve, though he was more positive and less self-undermining.

During the programme the main difficulty was encountered in the memorisation of the changes and of the structure of irregular verbs without the *-ed* ending: however, the verb memory game and especially *Snap!* provided at the beginning of the lesson helped the student to revise these verbs and to memorise them. This activity was particularly liked together with the use of the Lego bricks for the structure of the interrogative form of the present simple and present continuous, and for the change from the negative to the affirmative form in past simple because it was seen as a game rather than a specific language related activity. Considering the structure of the irregular verbs, he could not always remember to change the irregular verb of the affirmative form to the infinitive verb of the negative and interrogative forms: in these occasions, the student was not told the correct answer but it was only underlined how the sentence needed more attention. If the student could not find it autonomously, it was only mentioned how the mistake concerned the verb: after this instruction, the student was asked to find the verb in the sentence and to correct the error. However, noticing was not always successful and in these situations the tutor provided another example in the affirmative and

negative/interrogative form, in which all the steps were revised. At the end, the student could correct the sentence. The same strategies of error correction were used in other occasions, which helped the student to understand the mechanisms of English as a foreign language. Always concerning the past simple structure, some supplements were provided during the lessons: the verbs presented during the TPR instruction with memory were then kept aside and used when needed to help and guide the student if and when he had issues remembering the correct verb. These results were confirmed by the road map completed at the end of each section of the programme completed: the present simple and present continuous road sign were considered as *achieved*, contrary the past simple tense was not mastered as the other tenses, therefore the student retained it to be *quite achieved*.

5.2.4 *Language related abilities*

The information not directly linked with the research aims and features was not considered to draw the conclusions of the research. Nevertheless, the EFL skills of reading, speaking, writing, listening and comprehension were useful to confirm the issues students with dyslexia face when approaching to a foreign language: the issues encountered at the reading level were expected due to the difficulties students with dyslexia encounter at the phonological level while completing this language-related activity both in their L1 and consequently in the FL studied. Furthermore, when doing a writing activity students have to make sense of the writing in the FL using the grapheme/phoneme correspondence, considering also the original difficulties while completing this task in the native language. The difficulties at the oral level were consistent with the research of Kormos: since speech requires conceptualising the message, the activation of the relevant concepts and the decision on the language in which the message is conveyed, all these steps require a good mastery of all linguistic skill (Kormos, 2012): however, if one or more skills are weak, then FL speech fluency cannot be expected. Also the issues encountered at the listening level of the student are related to what Kormos (1997) referred to as the difficulties to access words from memory, which results in losing track of the flow of information. For instance, the speed of information processing was a factor influencing the understanding of the foreign language, as mentioned by the boy himself in the research. Improvements were seen at the speaking and vocabulary level: considering the former, the student was more willing to conduct a short dialogue in English, still using ritual formulas and short answers, but he tried his best to ask the tutor some questions and sometimes he started

and maintained a conversation as registered in the final observation grid. However, he did not feel ready to start speaking in class because he mentioned how he still needed more practice and self-esteem. Considering the vocabulary level, the student also increased the knowledge of the number of words he knew: before the beginning of the programme, the instructions such as *write* or *choose* were not always remembered; however, through the TPR games (i.e., miming, choosing a gesture for a specific action/object) and the continuous revision of words the student remembered the words more frequently and he also increased the number of vocabulary known. The specific instruction of vocabulary helped the learner also to understand the meaning of the sentences he was creating during the multisensory-based activities: previously, the fact of knowing a limited number of words did not help him to understand the meaning of the sentence, and therefore, all the attention was not centred upon the grammar task.

5.2.5 *Educational and emotional sphere*

Thanks to the programme the student began to focus more on the activities and on structures, which contributed to the personal success of the programme. In other tutoring activities not related to the programme, the homework related to these topics helped the student to complete and, most importantly, to understand them; he mentioned how he could complete an activity and understand a grammar explanation in the classroom environment thanks to the strategies acquired, which helped the student to achieve some goals of his educational success.

It was then concluded that the student enhanced his abilities in structuring the EFL sentence: added to this, this knowledge was also extended to the grammar activities he had to complete for his assigned homework, and he explained how some school activities were easier thanks to the strategies he had learnt. As a consequence, the student was very satisfied of his improvements, and he was less pessimistic towards the abilities he possessed concerning EFL learning. Surprisingly, the student asked whether the MSL and TPR activities could be performed with other language related topics: in fact, at the moment of the research he had started with the future tense using *will* and the student was mentioning the use the MSL instruction and the TPR to learn more about the structure of this tense. Therefore, through the introduction of this programme, also motivation, autonomy, engagement and self-efficacy of the student benefitted from this learning experience.

Conclusions

This final dissertation offered an overview of the literature concerning the Multisensory Approach, the Total Physical Response, and dyslexia and foreign language learning, in order to sustain the research question, which was “Do the Multisensory Approach and the Total Physical Response allow Italian students with dyslexia to improve the acquisition of English grammar knowledge, specifically the syntactic structure, their aptitude and their scholastic performance?”. All in all, it should be remembered that dyslexia is not the same for every dyslexic learner and it should not be regarded as homogeneous (Kormos, 2012), in fact there are various degrees of severity, different combinations of weaknesses and strengths and not all the signs mentioned are present in a person with dyslexia. Its signs can change with age and its state can be altered by “environmental/cultural influences and individual differences” (Nijakowska, 2019, p. 5). Nevertheless, a proper diagnosis together with a timely and appropriate instruction and support will improve the situation of the person with dyslexia, who will receive an appropriate accommodation and instruction, also because the number of the population with dyslexia is increasing and therefore there is more need for educational support, not only in the L1 but also in the FL, which usually has worse results compared to the former.

The Multisensory Approach and the Total Physical Response are applied with students with dyslexia because they are specifically designed to enhance their cognitive and linguistic abilities, and these methods reduce psychological issues and weaknesses related to this language difference. This means that the activities which are usually seen as an obstacle by these learners are eventually reached through the application of these methods, which make it possible to achieve foreign language knowledge, increase motivation and achieve scholastic success.

Teachers should consider the benefit these methods have on the educational progress of students with dyslexia and on their psychological profile: for instance, teachers should accompany these students in their educational progress because they are a fundamental component in the project of developing FL knowledge and, finally, also on the motivation of these students. To help students with dyslexia in the best way in their FL progress, teachers should be acquainted of the strengths and difficulties of these students and they should provide a timely support as soon as possible; as a consequence, they have to provide the most adequate accommodations and modifications to create an inclusive learning environment for all, concerning lesson planning,

instruction, the layout of the activity, the classroom environment, assessment and evaluation, and also the support these teachers provide, concerning their performance and the materials they provide. To achieve these aims, there are many different teaching techniques that can be implemented in the curricular foreign language classroom: as seen in the research, specific strategies and techniques can help and include students with dyslexia in their educational environment and they are simple devices and attentions that teachers can apply during their lessons. Moreover, teachers may help their students to discover the strengths and the abilities they have, or how to overcome a specific situation, increasing the awareness of the capacities of the learner: the outcome of this support results in the enhancement of the motivation of the student towards the subject studied and its related aptitude. As a consequence of motivation, positive effects can be seen at the emotional level and towards the abilities possessed by these learners. This means that teachers, who want to help a student which has similar issues as the learner described in the single case study, should first focus their attention on the cognitive aspects related to the acquisition of the EFL syntax which are misunderstood because it is also incomprehension paired with the feeling of disorientation and of uncertainty which can affect the emotional state of students. This cause-and-effect result was registered in the case study after the introduction of the MSL and TPR didactical methods, which led the student first to understand English and consequently to develop a new aptitude towards the language and also his own abilities: all these factors contributed to increase motivation. In fact, if teachers and instructors focus their attention of the FL element which is not understood or on other learning, emotional or motivational issues experienced by these learners, then the positive outcome on motivation, self-efficacy, and FL aptitude can develop as a consequence of understanding and through adequate support. These were the outcomes developed through the introduction of the Multisensory Approach and of the Total Physical Response to the learning experience of the participant with dyslexia to the single case study mentioned above: therefore, teachers who would like to sustain their students in their EFL learning experience should discover which are the most adequate supports these learners should receive to foster their learning, and also the best method and approach which benefits the motivation of their students. This was the approach adopted for this research and it is very plausible that if the student would not have received the guided instruction to develop the abilities of sentence creation, it would be probable that the learner would not have developed and increased his motivation towards EFL and also to believe in his strengths and abilities. Also the teacher who followed the student used

a linguistic approach for the instruction: nevertheless, the difference between the approaches used in the classroom and the ones used in the tutoring lessons is that in the latter the student could focus on a specific element of the foreign language with the attention needed, using methods which were tailored to sustain this type of student and to help him in his specific linguistic issues. This means that the programme was specifically designed to help the learner to overcome his linguistic issues because the activity was developed having in mind his features, strengths and the weaknesses. Other factors which made the two learning experiences different are multiple: the learner was given time to understand and to think, and he was spurred to ask questions and to give motivation of his choices, making his decisions valuable and not meaningless. Furthermore, the stressless environment of trust created allowed the student to be more confident to express his own ideas and to get involved in his own learning experience. However, it must be considered how in the classroom environment teachers are not always able to provide the appropriate time each student needs, and they have to lead all the group at the same time: consequently, occasionally teachers are not able to sustain their students as they wish, and therefore some students can be left behind. Nevertheless, teachers can insert little adjustments to their lessons to transform lessons in occasions of inclusion for everyone. As a consequence, teachers are the first promoters of an inclusive education and it is thanks to them that those students who may appear to have no possibility can appreciate their abilities and have a future of possibilities.

It was demonstrated the efficacy of these methods on the learning process and on sentence structuring concerning EFL with an Italian middle school student with dyslexia through the single case study of this final dissertation and through the analysis of the literature concerning the uses and outcomes of the Multisensory Approach and the Total Physical Response in FL learning. The results expected, provided by other research in the FL area, were matched with the outcome of the results provided by the case study. These methods that have been applied to grammar, especially concerning sentence structuring, allowed the student with dyslexia to clearly structure an English sentence at the syntactical level. Moreover, an improvement of the learning experience of the student and a simplification of the acquisition of knowledge concerning English grammar, its syntax and vocabulary were proved. The learning experience was positively enhanced: motivation, autonomy, engagement and self-efficacy of the learner with dyslexia benefitted from the implementation of this learning experience and also did the new aptitude of the student towards this language. This was demonstrated by comparing the

results offered by the two questionnaires compiled by the student and by the outcomes of the application of the programme. As far as academic progress is concerned, the learner managed to apply the knowledge about the tenses studied in the programme to the EFL school activities and to the grammar explanations of the teacher: as a result, the academic performance of the learner was slightly improved, while his aptitude towards his abilities and towards EFL was greatly enhanced.

Concerning the limitations of this research, there are some elements to consider because the conclusions which can be drawn and the comparisons which can be made are limited. This single case study has served as an example of the possible applications and outcomes of the use of didactical methods to help learners with dyslexia in their EFL experience. However, there are further implications of this final dissertation, which are multiple: the first constraint is related to the population of participants involved in the case study. Since the population sample involved only a student with dyslexia attending middle school and it developed in one-to-one lessons, the proposal could involve the following: the research could be expanded in order to allow more students with dyslexia to benefit of this teaching instruction, for example by increasing the number of participants in the tutoring lessons also because the Multisensory Approach and the Total Physical Response can be applied not only with students with special needs, but can also benefit all students; this means that these methodologies can be applied also in the classroom environment and not only in one-to-one sessions because all students can benefit from the introduction of these methods being dyslexic or not (Crombie, 2000). Moreover, the study could involve other age ranges and the programme could implement more verbal tenses, to sustain the future development of the student attending the following grades. This aspect was also requested by the student himself at the end of the programme.

As a result of the presence of these constraints, more research should be done, especially in the Italian scenery, focusing on this area of awareness building of EFL sentence structure using the Multisensory Approach and the Total Physical Response, and also by providing more differentiated materials to sustain the learning process of these learners. Achievable goals need to be set for these learners, so that they can participate in an inclusive learning experience. All in all, all these implications give evidence on the multifaceted nature of dyslexia, which renders the research in this area an educational challenge, rather than a life-long obstacle.

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Appendix A

QUESTIONNAIRE ON ENGLISH LANGUAGE LEARNING OF EFL LEARNER WITH DYSLEXIA


































MIDDLE SCHOOL


































BEGINNING OF THE PROGRAMME/ END OF THE PROGRAMME





































The instrument used to collect information directly from the student with dyslexia is a Likert scale questionnaire. The aim of the questionnaire is to collect information from the student, in order to become acquainted with the type of approach that the student has with English as a foreign language. The questionnaire is provided with a key of the possible answers that the student can give, which are *yes*, *sometimes* and *no*: each answer corresponds to an emoticon, because in this way the student with dyslexia can easily relate the answer to a visual image of it. The student has to cross out the emoticon corresponding to the question. The focus of the questionnaire is related to two aspects: the approach towards English language (engagement, self-efficacy, English lessons, English teacher, tasks, emotions) and English grammar (reading, writing, speaking, listening, syntax, grammar); the categories related to English grammar are also divided in subcategories. At the end of the questionnaire there is an extra section, in which the student can add additional information related to English. The instrument administered at the beginning and at the end of the programme: in this way, the answers can be easily compared to see how and in which degree the approach towards English language and English grammar has changed with the introduction of the Multisensory Approach and the Total Physical Response. The questionnaire is given to the student with the Italian translation and it will be read with the help of the tutor, who can help the student during the reading and can give further information if some questions are not sufficiently clear.


































KEY:**YES****SOMETIMES****NO**


































A	ENGAGEMENT			
1	Do you like going to school?			
2	Do you find it useful going to school?			
3	Do you like studying English?			
4	Do you like doing your English homework?			
5	Do you enjoy your English lessons?			
6	Do you look forward to start your English lessons?			
7	Do you like your English book?			
B	SELF-EFFICACY			
1	Are you good at reading in English?			
2	Are you good at writing in English?			


































3	Are you good at listening in English?			
4	Are you good at speaking in English?			
5	Are you good at English grammar?			
6	Is it difficult for you to remember rules, structures and procedures?			
7	Do you know many words in English?			
C	ENGLISH LESSONS			
1	Do you understand your English lessons?			
2	Do you need to take breaks very often during the English lesson?			
3	Is it difficult to maintain the focus during the English lesson?			
4	Do you remember the explanations of the teacher?			
D	ENGLISH TEACHER			
1	Do you get on well with your English teacher?			
2	Do you ask any questions to your English teacher when you have doubts?			








































E	TASKS			
1	Do you manage to complete a simple task on your own?			
2	Do you manage to complete an articulated task without asking for explanations?			
3	Do you manage to complete a task without asking for help?			
4	Do you need more time than allocated to complete tasks?			
F	EMOTIONS			
1	Do you feel insecure when studying English?			
2	Do you get really angry when you don't manage to do what you have been told?			
3	Do you get frustrated when someone corrects your mistakes?			
4	Are you happy if the teacher says that you have done a good job?			
5	Do you get mixed up when you are trying to remember information?			
G.1	READING			
1	Do you offer to read in English?			
2	Do you prefer silent reading?			







3	Do you get lost in a long reading?			
4	Do you need a rest after a long reading?			
5	Is it easier to read a mind map?			
6	Do you have problems with recognising some words?			
7	Do you read in English for personal pleasure?			
G.2	READING: COMPREHENSION			
1	Do you understand what you read when you read it out loud?			
2	Do you need to read a text many times to understand its meaning?			
3	Do you understand better if someone reads for you?			
G.3	READING: EMOTIONS			
1	Are you afraid when you have to read a text in English in front of your classmates?			
2	Do you get embarrassed while you are reading out loud?			
3	Do you feel frustrated while you are reading out loud in English?			
4	Does reading in English cause you problems such as headaches or anxiety?			

H.1		WRITING		
1	Do you have trouble with writing under dictation?			
2	Do you have difficulties in copying from the board or from the book?			
3	Do you prefer mind maps to written explanations?			
H.2		WRITING: SPELLING		
1	Do you have difficulties in finding possible mistakes while re-reading your work?			
2	Do you have difficulties in writing some words?			
3	Do you have problems with memorizing the spelling of some words?			
4	Do you have problems in recognizing and making sense of certain words?			
H.3		WRITING: ORGANISATION		
1	Do you have difficulties in finding, planning, organising, and writing down your ideas?			
2	Do you have difficulties in formulating sentences in English?			
3	Do you get lost when you start to write simple sentences?			
4	Do you get confused when you have to transform a sentence from the affirmative to the negative/interrogative form?			

5	Do you get confused when you have to transform a sentence from the negative/interrogative form to the affirmative form?			
I.1	SPEAKING			
1	Do you usually begin speaking in English, even if you are not asked to?			
2	Do you usually start a conversation in English?			
3	Do you have problems answering questions in English?			
4	Do you have trouble with the pronunciation of long words?			
I.2	SPEAKING: EMOTIONS			
1	Do you get agitated when you start speaking in English?			
2	Do you get confused when you start speaking in English?			
3	Can you speak in English in front of your peers without being anxious?			
4	Do you get frustrated when someone corrects your pronunciation?			
5	Do you have any problems in expressing your ideas?			
J.1	LISTENING			
1	Do you prefer listening to other people speaking instead of participating in a discussion?			

2	Do you get confused if your English teacher talks too fast?			
J.2	LISTENING: COMPREHENSION			
1	Do you have difficulties with understanding some people?			
2	Is it difficult to understand the main information of a message?			
3	Do you understand simple instructions in English? (e.g., listen, repeat, write, speak)			
4	Do you need time to understand the message you have been told?			
J.3	LISTENING: ATTENTION AND EMOTIONS			
1	Do you get distracted when you are doing a listening?			
2	Do you find it difficult to listen maintaining the focus?			
3	Does background noise influence your comprehension?			
4	Do you panic when you don't get a word?			
K	SYNTAX			
1	Have you ever exercised on how to structure a sentence at school?			
2	Do you know how an English sentence is organised?			

3	Can you distinguish the elements that compose a sentence?			
4	Do you know what a subject, verb and object are?			
5	Do you know the function of a subject, verb and object?			
6	Do you know how to place subject, verb and object in a sentence?			
7	Do you know that there are some features that make us understand the type of sentence we are looking at?			
L	GRAMMAR			
1	Do you have difficulties in studying English grammar?			
2	Is it difficult to remember grammar structures?			
3	Do you manage to apply the learnt knowledge to exercises?			
4	Do you have difficulties in doing grammar exercises?			
5	Do you have trouble with understanding a task in a grammar exercise?			
6	Do you need clear examples to understand a grammar rule?			
7	Do you manage to follow a grammar explanation?			
8	Do you prefer having a mind map with all the important information?			

9	Do you find similarities between your mother tongue grammar and the English one?	  
10	Do you get bored during grammar lessons?	  

M	ADDITIONAL INFORMATION	
1	Add your ideas, feelings, fears about learning English as a foreign language (optional).	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
2	Put in order of preference the activities that you prefer:	<input type="checkbox"/> READING <input type="checkbox"/> SPEAKING <input type="checkbox"/> COMPREHENSION <input type="checkbox"/> GRAMMAR <input type="checkbox"/> SYNTAX <input type="checkbox"/> LISTENING <input type="checkbox"/> WRITING
3	Favourite subject(s):	<hr/>
4	Favourite activities and activities done in the free time:	<hr/> <hr/> <hr/> <hr/>

Appendix B

STUDENT OBSERVATION GRID – MIDDLE SCHOOL

The observation grid is the instrument used by the tutor to collect information from the student before the programme begins. Through this instrument, the tutor can have a general overview of the profile of the student: the elements analysed concern attitude, motivation, behaviour, personal feelings, scholastic progress and aptitude, engagement and knowledge concerning English as a Foreign Language. The observation grid is divided into three macro sections: the general section, the language section and the section in which further information can be added. The former has the following categories: autonomy, learning processes, affective-relational, memory, behaviour and organisation areas; then, the second category specifically dedicated to language has the sections dedicated to general observations, comprehension, reading, writing, listening, speaking, syntax and grammar. Finally, the latter is the section in which further observations concerning favourite and extra activities and desires can be added, thus the tutor can rely on these aspects when interacting with the student. The observation grid is provided with a key of the possible answers, which are *always*, *often*, *sometimes* and *never*: each answer is given by adding a cross in the corresponding section. The instrument is completed before the beginning of the programme and at the end of the research to compare the differences in the results. Parents and schoolteachers can be interviewed in order to discover additional information concerning the student, so that the tutor has a complete knowledge of the situation.

Key:

ALWAYS	The element is present during each tutoring lesson (100%).
OFTEN	The element described is present with a high frequency but not in all the situations in which the learner is present (75%).
SOMETIMES	The element described is present with a low frequency and in a few situations in which the learner is present (25%).
NEVER	The element is not present in any tutoring lesson (0%).

A	AUTONOMY AREA	Always	Often	Sometimes	Never
1	Simple single tasks can be performed				
2	Articulate tasks can be performed				
3	Articulate tasks are completed in autonomy				
4	Instructions to organise the procedures for the execution of a task are needed				
5	The assignment has to be repeated more than once				
6	Tension and frustration are handled				
B	LEARNING PROCESSESS AREA	Always	Often	Sometimes	Never
1	The student can organize the time schedule				
2	An action time is planned (i.e., <i>before I have to do this and then ...</i> , etc.)				
3	Focus is maintained on the task				
4	Attention is kept for a long time				
5	More time is needed to accomplish the tasks				
6	Recovery/Extra time is needed				
7	Distracting sounds are ignored				
8	Tasks are done slowly				
9	The student tires with ease				
10	The new knowledge learnt is applied				
C	AFFECTIVE-RELATIONAL AREA	Always	Often	Sometimes	Never
1	The student has emotional issues (i.e., extreme shyness or insecurity, aggressiveness, sadness, anxiety)				
2	The student has low self-esteem and lack of confidence in the personal abilities (i.e., <i>I can't do it, It's too difficult for me</i>)				
3	The student shows lack of curiosity and interest towards the school				
4	The learner seems unmotivated				
5	The student shows insecurity				
6	A lack of tolerance towards frustration is shown				
7	The student is indifferent towards reproaches				

D	MEMORY	Always	Often	Sometimes	Never
1	Information and notions acquired and understood are remembered				
2	Names and dates are confused or difficult to remember				
3	The sequences of a text are remembered and repeated				
4	Rules, structures, sequences and procedures are memorised				
5	Verbal tenses and grammar structures are memorised				
6	Complex verbal instructions are remembered				
E	BEHAVIOUR	Always	Often	Sometimes	Never
1	The rules are respected				
2	Homework is done regularly				
3	School is attended regularly				
4	Emotional displays are controlled				
5	The student participates more actively when no writing or reading tasks are given				
6	The student has low capacities of maintaining the focus				
7	The student has recurrent performance anxiety episodes				
8	The student seems distracted, lazy or indolent				
9	The student has difficulty of remaining seated and asks often to go out				
10	The student has unexpected crisis of anger				
11	The student devises escape and avoidance mechanisms towards schooling				
12	Responsibility is not bore				
13	Irrelevant questions and remarks are done				
F	ORGANISATION	Always	Often	Sometimes	Never
1	School equipment (i.e., diary, notebook) is treated with attention, care and order				
2	The student can organise an activity				
3	The organisation of the space of the sheet is managed				

4	If there is little space left for writing in the exercises of the book, the student accomplishes with difficulty the task				
5	The academic performance is discontinuous				
6	The timing of execution of the tasks can vary (slow or hasty)				

LANGUAGE SECTION

G	GENERAL OBSERVATIONS	Always	Often	Sometimes	Never
1	Studying English language shows more difficulties compared to other subjects				
2	The student is intolerant, insecure and clumsy towards English as a school subject				
3	Activities are organized with difficulty				
4	Simple tasks are completed				
5	Individual sounds that compose words are segmented, blended and recognised				
H	COMPREHENSION	Always	Often	Sometimes	Never
1	Oral information is understood easily				
2	The main information of a message is understood				
3	The comprehension and the re-elaboration of a message is slow				
4	Listening comprehension is adequate. During the explanations the student grasps the general meaning				
5	The text is understood when it is read aloud				
6	Long texts are understood				
7	A better understanding is assured when the student silent reads				
8	If someone else reads, comprehension is eased				
9	Better understanding is achieved with graphic texts, maps and tables				

I	READING	Always	Often	Sometimes	Never
1	Little intonation and pitch are present when texts are read aloud				
2	The student is fluent				
3	Reading is done slowly but it is overall correct				
4	Autocorrection is done when reading alone (i.e., going back and reading the same word more than once)				
5	When reading a text aloud, semantic anticipations are done, therefore substitution morphological and lexical errors are done				
6	Complex phonological words are decoded				
7	The student reads in syllables				
8	The student is aware that sounds correspond to letters or to letter combinations				
9	High frequency lexicon is recognised (i.e., <i>aren't</i> , <i>was</i> , <i>they</i> , etc.)				
10	The student has a limited lexical competence				
11	The student proposes to read aloud				
12	Silent reading is preferred				
13	Sings of frustration are shown while reading				
14	While reading keeping still is difficult				
J	WRITING	Always	Often	Sometimes	Never
1	The order of letters and/or numbers is inverted when writing				
2	Capital letters are not used at the beginning of the sentence, for names or when needed				
3	Punctuation is used correctly				
4	Complex syllables are written				
5	Organising a written text is difficult				
6	In the process of writing some difficulties are encountered				
7	In the review stage of a written text difficulties are encountered				

8	Poor developed written texts are produced (i.e., few sentences are written)				
9	The student commits a few mistakes when copying from the book or from the blackboard (i.e., skips lines, leaves out words, the same line is rewritten)				
10	The student shows more competence in oral activities				
K	LISTENING	Always	Often	Sometimes	Never
1	A listening exercise is finished without difficulties				
2	Simple instructions are understood (i.e., <i>listen, repeat, write, speak</i>)				
3	The student can focus on prominent information during a listening task				
4	Repetition is asked when the student has not understood				
5	More time is needed to understand what is being said				
6	During listening activities, the student gets distracted easily				
7	When someone speaks fast, the student understands with difficulty				
8	The student panics when a word or a sequence of words is not understood				
L	SPEAKING	Always	Often	Sometimes	Never
1	Interaction is done in simple and short conversations on themes of personal or everyday interest				
2	The student can start and maintain a conversation with a person				
3	The student gets agitated when English is spoken				
4	The student answers with uncertainty to the questions asked				
5	Long words can be pronounced				
6	The oral message can be organised				
7	The student shows signs of discomfort and frustration when corrected				

M	SYNTAX	Always	Often	Sometimes	Never
1	The elements that compose a sentence are recognised (i.e., subject, verb, complement, adverb, adjective)				
2	The function of the elements that compose a sentence is known				
3	Affirmative, negative or interrogative sentences are recognised by observing the position of the elements in the sentence				
4	The focus is on a key element of a sentence that allows to recognise the type of sentence				
5	The SVO structure is used also in interrogative sentences				
6	Elements such as auxiliary, regular past participle (-ed) and the progressive form (-ing) are forgotten				
7	The correct order of elements is confused				
8	The student is aware that English syntax follows a specific order in the collocation of elements in a sentence				
9	The Italian syntactic structure is confused with the English one				
N	GRAMMAR	Always	Often	Sometimes	Never
1	The student has weaknesses in grammar knowledge and competences				
2	The student remembers grammar structures				
3	The student applies the new grammar notions to the exercises				
4	The student understands the indications of grammar exercises				
5	The student needs an example to understand the grammar rule				
6	The student follows with attention and with perseverance the grammar explanation				

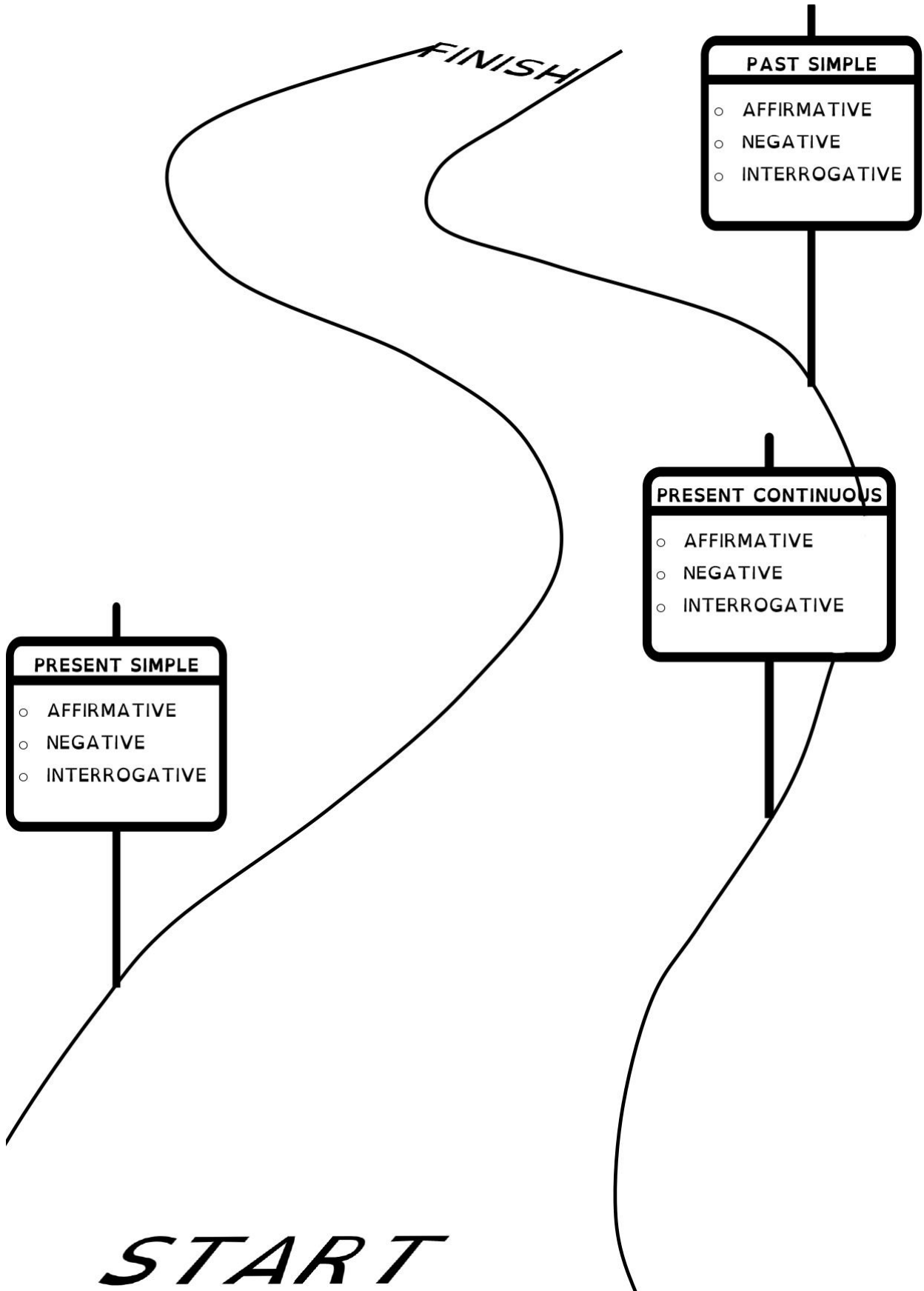
7	The student prefers concept maps with important information to written explanations				
8	The student makes comparisons between Italian and English grammar				

	STRENGTHS	OBSERVATIONS
1	Activities preferred (theatre, cinema, reading...)	
2	Sport activities	
3	Interest towards technology or computer science	
4	Interest towards music (both listening and playing an instrument)	
5	Favourite subjects	
6	Subjects in which the student succeeds	

7	The student has expressed a desire or a need of the school situation	
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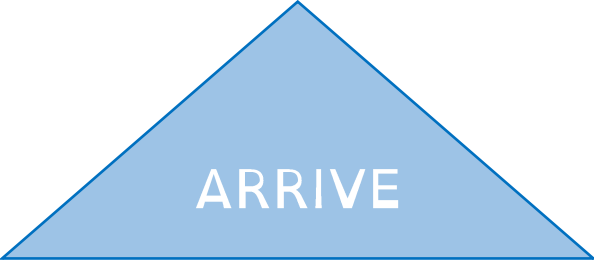
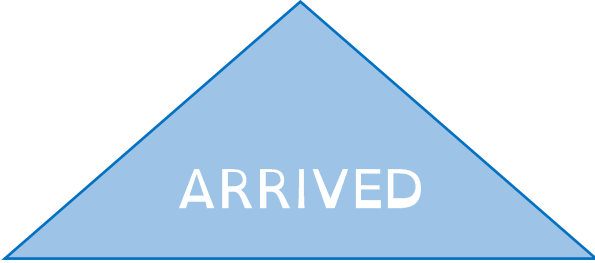






Appendix C

ROAD MAP



Appendix D

VERB MEMORY GAME

 <p>ARRIVE</p>	 <p>ARRIVED</p>
 <p>BE</p>	 <p>WAS/ WERE</p>
 <p>BUY</p>	 <p>BOUGHT</p>
 <p>COOK</p>	 <p>COOKED</p>

DANCE

DANCED

DO

DID

DRAW

DREW

DRINK

DRANK

DRIVE

DROVE

EAT

ATE

GIVE

GAVE

GO

WENT

HAVE

HAD

LIKE

LIKED

LISTEN TO

LISTENED TO

LOOK AT

LOOKED AT

MEET

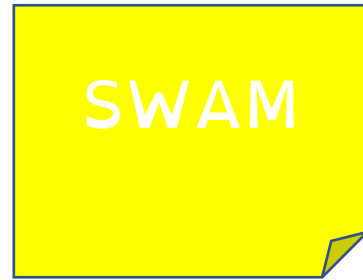
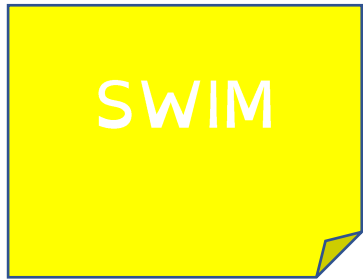
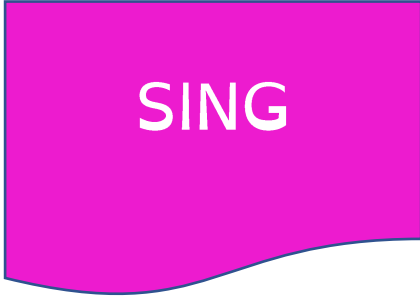
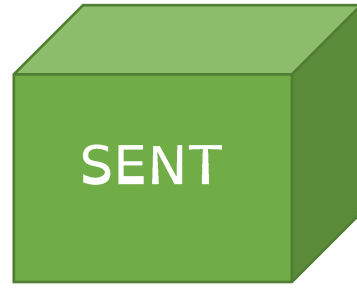
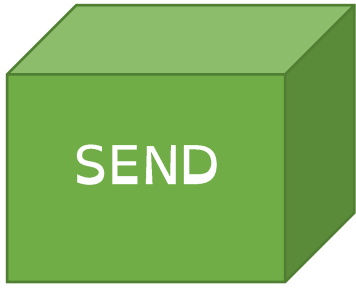
MET

PLAY

PLAYED

READ

READ



WALK

WALKED

WEAR

WORE