

METHODS AND STRATEGIES OF TEACHING ENGLISH ON CHILDREN WITH
ASPERGER'S SYNDROME

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ABSTRACT

English has become one of the most important languages worldwide, that's why the current trend is to focus its acquisition from the Colombian board of education (MEN) to the private, regional and local public schools (Velasco, 2016). The process of English language has had a huge impact on many aspects such as: Special cognitive conditions in which many students are immersed and of course they're attending lessons regularly. These students have been diagnosed with Asperger's syndrome, who have neither meaningful cognitive disorder nor language backwardness (Naranjo Flórez, 2016), but they've been isolated by others precisely because of their conditions, making them have obstacles in their English learning process. Thus, the aim of this study is to describe methods and strategies of teaching English to children with Asperger's syndrome. A type of descriptive study was carried out using the available online data base and bibliographical material both in English and Spanish versions. These research findings are very helpful in the English teaching area on children with this type of disorders, boosting the creation of new study plans or curricula focused on communicative and social characteristics.

Keywords: English teaching, educational techniques, children, Asperger's Syndrome, Asperger's disease.

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CHAPTER 1

INTRODUCTION

Justification

English has been considered the “Lingua franca” worldwide becoming the most important international communicative language nowadays (Rodríguez Rodríguez, 2013), its usage spreads out all over the knowledge areas and human development. It is because of the immigration of native speakers around the world in different stages of the history. The first spreading of the English language was throughout north American region, South Africa, Australia and New Zealand (Lorenzo Castro, 2000), the second spreading went through Asia and Africa regions, in that way the Industrial revolution in which England and the Internet contributed to the expansion of the language. Based on its importance and globalization, English is spoken in 90 countries, most of the Airlines communicate in English, the 80% of internet information is given in English, 2/3 of the science articles are written in English. That’s why English learning is considered as a need to be spoken. (Rodríguez Rodríguez, 2013).

The recent trend is to foster the children's English learning from school, considering that, acquiring a foreign language from early ages is an advantage for all kids. This means that during the first stages of a child's life, the brain is malleable and susceptible to new learning experiences, leading this process to a faster, easier and better pace and rhythm; thus, it is suggested that the best ages to learn a foreign language is between 12 & 13 as well. (Díaz-Jiménez, 2014; Diez, 2010).

This children's teaching process is complex, since the teacher needs to see how to teach each group individually. He also needs to deal with a group of learners, makes them behave well, grades exams as well as tasks, preparing classes, design attractive and interesting learning strategies in order to impact positively and stimulate the students' learning process. In addition, it's a little bit more complex for teachers who face children with special conditions taking lesson in those classrooms, such as diagnosed children with Asperger's syndrome, being this disorder related to the development and characterized by a breakdown in their social interaction, communication gaps and most of the time they are reluctant to play with other kids as well as having a weird behavior and different interests. (Naranjo Flórez, 2016). Attwood (1997) refers to three types of disabilities (interaction, unusual social communication and lack of flexibility or imagination) described by Wing y Gould (1979), it may cause obstacles in the learning process in kids with Asperger, especially for their needs of routine and order, since the absence of these may keep them off studying until they can be settled down again (Attwood, 1997; Wing & Gould, 1979).

Worldwide, it's been found that in Europe there might be 5 million people with autistic spectrum disorder (Asperger's syndrome included) and in the U.S., one of each 88 children is

involved with this spectrum, showing that it is a kind of disease whose incidence has been increasing (Fernández-Mayoralas, Fernández-Perrone, & Fernández-Jaén, 2013).

According to “Liga Colombiana de Autismo y el Ministerio de Salud y Protección Social” in 2013 (“MinSalud includes Autism as the study of mental health,” 2013), Colombia has no accurate data about the prevalence of children with the autistic spectrum (Talero et al., 2003) (Asperger’s syndrome included), but it’s estimated that 16% of the population under 15 may have one of these disorders.

Statement of the Problem

Colombia is currently in a bilingualism program which is focused specially on the domain of English language (Velasco, 2016), nevertheless, there are multiple factors that lead to get a process that focuses on pursuing a tough aim, which is getting to know the learning strategies of children with special cognitive conditions (Salluzzi, 2014); there are some published books, researches, guides related to the characteristics, obstacles and difficulties that some Asperger’s syndrome children may face in their learning process, however, there are a few reports about the strategies and teaching English methods for children with autism disorder, that’s why it rises the following statement of the problem: What are the English teaching methods and strategies for children with Asperger’s syndrome?

Objectives

General Objective

To describe the strategies and methods of teaching English to children with Asperger's syndrome

Specific Objectives

1. To explain the physical and cognitive characteristics of children with Asperger's syndrome which could alter their learning process.
2. To describe practical suggestions for the acquisition of a foreign language in children with Asperger's syndrome.
3. To identify the most suitable strategies or teaching activities for children with Asperger's syndrome.

CHAPTER 2

LITERATURE REVIEW

Autist spectrum disorder

The acronym Autist spectrum disorder (ASD) is used as a synonym as well as generalized disorders of the development to be referred to Autism and four similar conditions described in the Diagnostic statistics mental disorder (DSM)) (Faras, Al Ateeqi, & Tidmarsh, 2010). These types of disorders are defined by characteristics and absence in relationships and social interaction in communication (Baron-Cohen, Wheelwright, Skinner, Martin, & Clubley, 2001), as well as the presence of interests and unusual, restrictive and repetitive behaviors. The social disabilities are affected in all the other autist spectrum disorders. Beside the autism, the DSM includes four similar conditions related to autism such as: Asperger's syndrome, Rett syndrome, Childhood disintegrative (Steiner, 2011)

Asperger's syndrome

Asperger is an acute and chronic syndrome of neurodevelopment characterized by meaningful and severe deficits, as well as the presence of interests and unusual restrictive and repetitive behaviors, similar to Autism, but in contrast, the cognitive abilities and the language remain intact. (McPartland, Klin, & Volkmar, 2014). This condition was initially identified and recognized as "Autistic psychopathy" by Asperger in 1944. The patients listed with this condition had intellectual abilities as well as average language with significant alterations in social and affective communication. (Toth & King, 2008).

Learning

Learning ability is one of the most outstanding characteristics of the humankind. This process occurs continually during our lives. In this learning definition there are many experiences which vary from one person to another. Due to these perceptions the thoughts and feelings of a person may change. So, learning may be defined as a change of behavior as a result of everyone's experience. This behavior may be physical, attitude and intellectual.(Schunk, 1997).

English language

English is a west German language which is considered the most common nowadays becoming a world language (Lass, 2000). English is spoken for a population quarter, approximately 1.75 billion people worldwide; in other words, 1 of 4 people. In addition, there's a huge number of non-native speakers, whose average increases every year exceeding the amount of native ones (Leith & Leith, 2005).

Teaching a foreign language to children with Autistic spectrum disorder (ASD)

The research on the field of teaching a foreign language to children with Autistic spectrum disorder has been focused on the seeking of therapies and the creation of educational programs related to the training of doctors, therapists parents and teachers as well. Reppond reported about a study and showed how teachers can work together with parents whose sons have ASD in order to guarantee an environment which makes their sons' English learning acquisition easier(Reppond, 2015). Among all the findings on this research there is a hurdle which concerns most teachers who work with children with ASD: Lack of communication, lack of training, material, more open-minded teachers, lack of qualified personnel, lack of time to meet students and parents together. These types of needs show the importance of the teacher's role in the

learning process of children with ASD. Other studies have described the own characteristics of students with Asperger's syndrome which may affect their English learning process as a foreign language. Harbison and Alexander (2009) stated that one of the main diagnostic criterium for Asperger's syndrome is the damage of imagination; thus, this disability may affect learning on students with Asperger's syndrome, which can be "English" as a language. English teachers make efforts to bring creative and dynamique classes and material, unfortunately, an Asperger's syndrome student may feel frustrated with this type of tasks or approaches and may be reluctant to participate on them. Unlike other knowledge areas, in which a literal and logic thinking is required, English demands more creative material, since a positive experience in teaching this foreign language for this type of students may be more focused on the use of techniques or methods targeted on their conditions (Harbinson & Alexander, 2009).

CHAPTER 3

METHODOLOGY

A descriptive study was developed in this monograph. On *Figure 1* the methodological phases are shown, in which the first phase, has the use of the main data base online available and bibliographical material related to the strategies and methods of teaching English to children with Asperger's syndrome. The search was developed both English and Spanish words combining Boolean's connectors "AND", "OR", "Y", "O". Some other words were used as follows: "English teaching", "English language", "teaching method", "teaching strategy", "educational techniques", "child", "Asperger's syndrome", "Asperger's disease", "enseñanza de inglés", "inglés" "método de enseñanza", "estrategia de enseñanza" "niño" "Síndrome de Asperger", "enfermedad de Asperger", suggested by authors such as Reppond (2015). On the seeking limits it was taken into account just the bibliographical material dated from the last 10 years. There were included only studies and bibliography which had methods and strategies to teach English to children with Asperger's syndrome and not other autistic spectrum disorder as Autism, Rett's syndrome Childhood disintegrative disorder and the generalized development disorder. Likewise, there were some other studies which were excluded focused on an age group different from childhood. After collecting the information, the methods and strategies were classified by chapters and subchapters to be described in this study.

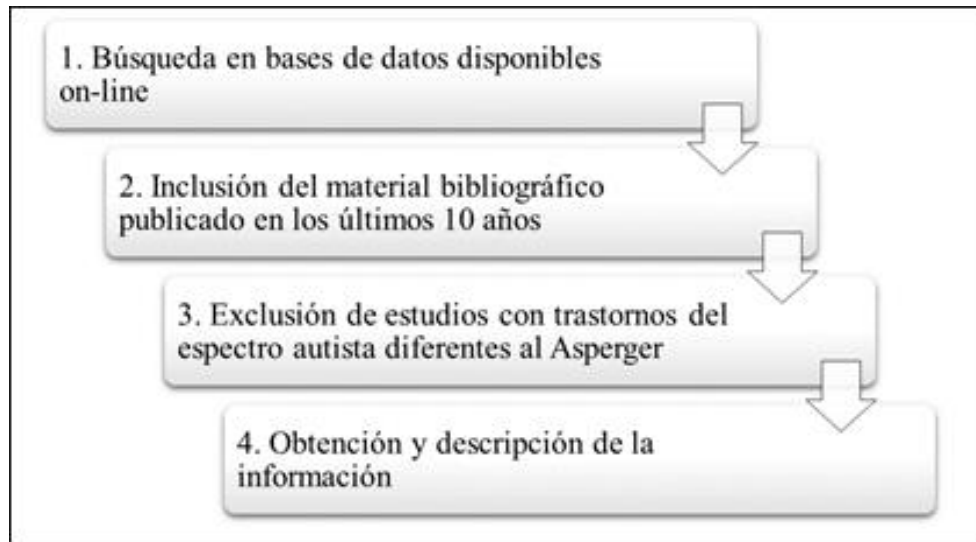


Figure 1. Methodological phases of literature review

Learning methods and strategies

While searching the first literature review, it was found different techniques or methods published, being the special teaching, the most modern among others described by Willems (2016). The special method is used in special teaching centers which allows the development of topics through making smaller groups based on reduced contents of topics to be taught. This modern method makes students be more autonomous and independent; the classic method offers to the students a more structured teaching with grammatical schemes and a list of vocabulary as well. Additionally, there was enough evidence method described by Marín & Arce (2010) called “Total Physical Response”. In this method, the fields of psychology and pedagogy meet, in other words, the student’s performance is achieved by the way they identify their learning through didactic. These strategies are more suitable since children learn in a better way through the use of vocabulary and the communication spoken in learned topics.

Taking into account the common level reference described by The British council, (2001) which enables a general framework divided into six wide levels that are set to show accuracy in

each learning obtained by each student in European languages. The learning strategies will be described and its characteristics related to its linguistic competence which can be deduced from it.

Table 1. Common reference levels: Global scale

Competent learner	C2	Can understand with ease virtually everything heard or read. Can summarize information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognize implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing a controlled use of organizational patterns, connectors and cohesive devices.
Independent learner	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.

	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans
Basic learner	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

Adapted from: Common european framework of references

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Adapted from: *Common European Framework of References for languages: Learning, Teaching, Evaluation.*

CHAPTER 4

THEORICAL FRAMEWORK

Physical and cognitive characteristics of children with Asperger's syndrome

In the manuals of diagnostic classification of the mental disorders currently in force (DSMIV and CIE-10) the diagnosis of Asperger's syndrome is introduced, as a specific and independent classification inside the widespread development disorders (see figure 2) (Hernández Rivero, Risquet Águila, and León Álvarez, 2015; Ibor, 1994; Hill et to., 2001; Psychiatry, 1995).

Among the criteria for the diagnosis of Asperger's syndrome (DSM-IV, Willems 2015) there are:

- A. Qualitative alteration of the social interaction, demonstrated at least by two of the following characteristics:
 - (1) Important alteration of the use of multiple nonverbal behaviors like ocular contact, facial expression, body language positions and regulatory gestures of the social interaction.
 - (2) Inability to develop appropriate relationships with peers according to the individual's developmental level

(3) Absence of the spontaneous tendency to share enjoyments, interests and goals with other people (e. g., Not to show, bring or teach other people objects of interest)

(4) Absence of social or emotional reciprocity

B. Restrictive, repetitive and stereotyped behavior and activities, expressed at least by one of the following characteristics:

(1) Absorbing concern for one or more stereotyped and restrictive patterns of interest that are abnormal, either for their intensity or for their objective.

(2) Seemingly inflexible adherence to specific and non- functional routines or rituals

(3) Stereotyped and repetitive motor mannerisms (e.g., shaking or twirling hands or fingers, or complex movements of the whole body)

(4) Persistent concern for parts of objects

C. The disorder causes a clinically significant impairment of social, occupational, and other important activity areas of the individual.

D. There is not clinically significant delay in language development (e.g., by 2 years old the individual uses simple words, by 3 years old he uses communicative phrases).

E. There is not clinically significant delay in cognitive development or development of self-help skills appropriate to the age, adaptive behavior (different from social interaction) and curiosity about the environment during childhood.

F. Do not fully meet the criteria for other pervasive developmental disorders and schizophrenia.

Asperger's syndrome is defined as the combination of absence of any language or cognitive delay clinically significant, presence of qualitative deficit in social interaction (e.g., in Autism) and repetitive and stereotyped manifestations, of interests and activities in general, (e.g., in Autism). There may or may not be communication problems similar to those of autism, but a significant language delay rules out the diagnosis (WHO, 1992). The etiology is mainly of genetic origin in 30 - 60% of the cases, most of the cases have a family history in varying degrees of consanguinity; with social problems, of communication or both (Haq & Le Couteur, 2004).

The cognitive capacity of the child with Asperger's syndrome is not affected, the most common is that these individuals have normal-medium or normal-low IQ. One aspect that should be highlighted is that these children have difficulty paying attention of the whole over the detail. Similarly, the sense of time may be distorted, where hours may have passed, you may have the sensation of only having spent minutes, and this mismatch of time could be a basic factor to generate problems in social interactions. Sometimes, the long time between question and answer in the dialogue with the child with Asperger's syndrome can be exasperating, overcoming the interlocutor's patience. It must be taken into account that the figure or number of the IQ is not an indicative parameter to predict the individual's learning capabilities, however, it may hinder this process (Szatmari, Bremner, & Nagy, 1989).

It has been stated that there may be linguistic alterations in Asperger's syndrome, however, it is pointed out that individuals with this syndrome must fulfill the following functions concerning to language: abnormalities in inflection, talking too much, little of speaking, lack of cohesion in

conversation, idiosyncratic use of words and repetitive language patterns. The language is preserved, but altered in the contextual use (López & Munguía, 2008).

Children with Asperger's syndrome may have a lack of attention, linked to situations of social interaction where this individual may abandon interest in maintaining attention, while in certain conditions where the subject can generate interest, he remains hyper concentrated, therefore, it has been stated that children with Asperger's syndrome may present attention disorders (López & Munguía, 2008).

In the scientific literature, it has been postulated that the signs characteristic of individuals with this syndrome of development, are: 1- important alteration of the use of multiple nonverbal behaviors such as eye contact, facial expression, body postures and regulatory gestures of social interaction. 2- Inability to develop appropriate relationships of the individual's development level with peers. 3 - Absence of the spontaneous tendency to share enjoyments, interests and objectives with other people. 4- Absence of social or emotional reciprocity with other people. 5- Seemingly inflexible adherence to specific routines or rituals. 6 - Stereotyped and repetitive movements, for example, shaking or twisting the hands or fingers, complex movements of the whole body. 7- Persistent concern with parts of objects. 8- Impairment of the individual's social, occupational and other important activity areas. 9- There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills 10 - Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia. (Ehlers et al., 1997).

Each child or adult who has Asperger's syndrome shows different characteristics of the personality and / or difficulties in social interaction during their lives. Although people with this

syndrome usually appear physically and cognitive normal, they have difficulties in social interaction, in verbal and non-verbal communication, repetitive routines, little flexibility of thought and specific interests (Barquero, 2007).

Educational techniques used in children with Asperger's syndrome to learn a foreign language

Practical recommendations on the teaching of children with Autism Spectrum Disorders (ASD) and how to develop child- friendly schools

United Nations Educational, Scientific and Cultural Organization (UNESCO) (Harris, Miske, & Attig, 2004) suggests that all teachers should consider as their responsibility, the identification of every child's need, especially children with disabilities, as well as children with autism spectrum disorders.

A particular teacher should be trained to be as a focal point or contact with other teachers who are teaching children with ASD. This will allow contact with other more experienced teachers, who at the same time, will be able to share this experience with others inside and outside the school, including community programs and nearby education authorities.

The school's information system should be constantly updated in relation to the development of educational strategies for children with ASD and that promotes the usage by teachers, school

administrators and parents. Among these, the specialist team should support these information centers through the creation of a dynamic support system.

The curricula for children with ASD should be structured, individually to meet their needs. These plans should include opportunities to generate learning skills in different environments.

Teachers can be involved in learning strategies in two ways: knowing about the support and strategies that are most used for their student's particular needs and through the use of strategies designed autonomously (McDonough, 1995). This refers to the importance of understanding the learning strategies of the student with Asperger's syndrome, which may vary from students, as well as developing the appropriate strategies to develop, in turn, the potential of these groups of children. They must accept that the student with Asperger's syndrome may experience difficulties in evaluating the curriculum of a foreign language, even if the child seems not to have or show difficulties. That is why the teacher's preparation is needed in order to adapt the work of teaching to the student's process (Wire, 2005).

Rebekah Bush conducted research reported in the paper entitled: "Educating children with autism spectrum disorder within the Primary Years Program framework: The Latin American perspective", where she conducted interviews with teachers who had links in the classroom with children diagnosed with some autism spectrum disorder, reported that some teachers made differences in the learning interaction and / or in the evaluations of children with the disorder. Regarding to the techniques and strategies used to teach children with autism, the predominant response was pertaining to the issue of sensory supports, highlighting several examples of them,

such as, the work from a collaborative approach, involving joint work among teachers other techniques corresponded to the use of visual supports, individualized support to students, task and resources modifications, peer modeling, self-evaluation technique, adaptation of physical environments and verbal reminders. She also highlighted the teacher's support in social skills, the differentiated admission process, ignoring negative behaviors, administering medications and training other students about autism. Similarly, the research reported motivational techniques, such as the use of prizes, incentives, public recognition for students, positive reinforcement, praises, the use of games, the use of work agreements, some interviewed teachers pointed out the negative reinforcement to motivate their students, the use of stories and jokes(Ens).

It is relevant to mention that different programs emphasized in education for children with developmental disorders have been developed, among them the TEACCH: Treatment and Education of Autistic and related Communication Handicapped Children), it was developed in the early 1970s by psychologist Eric Schopler and collaborators at the University of North Carolina. This program uses an approach called "Structured teaching", which emphasizes a very structured and predictable classroom environment, and the use of visual learning, which is a strong point for people with autism.

The TEACCH program has separate and defined areas for workloads such as individual work, group activities and play. The lessons focus on the use of visual support, for example teachers use images to communicate the schemes and thus help students in the transition between activities(Willems, 2016).

It has been previously reported that there are three educational techniques or teaching methods in children with Asperger's Syndrome for learning a foreign language: special teaching method, the current method and the classical method (Willems, 2016).

Special teaching method

This method is used by the institutions that provide special teaching, it consists on developing the subject in small groups and less daily topic content, to avoid an excessive flow of information, which in turn allows students to repeat what they have learned before moving on to a new subject. This method is considered to be more adapted for children with Asperger's syndrome, for the support in the way of providing connections, adequate repetition and topic content taught in smaller proportions. It is considered then, the simplest for the learning of a foreign language, but it should be noted that it does not consider communication and social interaction (Willems, 2016).

In Willems' study, 18 students were examined in order to determine differences between the different methods used. It was found that the special teaching method is more suited to children with Asperger's syndrome by dividing the material of the lessons into smaller amounts and by repetition.

The current or modern method

This is a method based on the idea of a new way of learning and it allows students to investigate more about what they are receiving, fostering independence. This method has a disadvantage, it requires a self-taught attitude by the student, which is not related to the needs of the child with Asperger syndrome, who requires structure and order for his/ her development learning (Willems, 2016).

Through the current or modern method learning the vocabulary is emphasized, in Willems' study, the children received 10 sentences with marked words, where they had to guess the meaning by the context, subsequently, they were examined for the second time. The children had to give sentences where they should choose from the options given the word that corresponded with the phrase. This method varies with the classical method and the special teaching method, not only by asking the meaning of the vocabulary, but also by giving choices and letting the child choose the correct word and translate it. The results with this method are not enough to draw conclusions to conclude if it is more appropriate or not for children with Asperger's Syndrome.

Classical method

It consists of providing the student with sufficient structure in the teaching, grammar schemes, vocabulary lists and excessive repetition. This can be considered appropriate due to the use of schemes, having a clear order and the use of memorization as a form of learning, which implies a lot of repetition (Willems, 2016).

These methods previously discussed, can be developed taking into account the following educational practices proposed by Navarro (Navarro, Fernández, Soto, & Tortosa, 2012):

- Development of cognitive skills.
- Relaxion and self-control.
- Reading comprehension.
- Teaching social skills.

Development of cognitive skills. Different actions are proposed so that students do not experience difficulties in the planning and execution of activities that require the use of memory and mental flexibility. Among these actions there are some others, to plan, together with the student, using his / her agenda, classroom activities; teach the student to use a bilingual dictionary as a necessary material for the activities; improve concentration and student attention through short, attractive and varied activities, achieving greater motivation when the level of difficulty of the activities is between low and medium. If a student does not know more than 10% of the vocabulary of a text, it is very likely that he loses his motivation and does not continue the development of the activity. (Navarro et al., 2012).

Relaxation and self-control. Usually the foreign language student can suffer tension during the learning process due to the insecurity generated by not having the vocabulary or handling a strange communication code. In the case of the student with Asperger's Syndrome, this tension is usually greater, due to the limitations they have for communicating, imagining and the exposure to new situations. In order to reduce this tension, breathing exercises, sudden movements of the muscles of the face, tensing and loosening them can be encouraged. Physical activity exercises that favor the interaction of movement and play with learning the foreign language should be included (Navarro et al., 2012).

Reading comprehension. It is necessary that the material used for reading when teaching the foreign language could be attractive, so that the exploitation of the text is effective. The interest of the student with Asperger Syndrome can be investigated and his/ her motivations and likings adapted when searching an appropriate book. The complexity of the text must be less and the independence of the student must be encouraged. Pre-reading activities can be considered, such as predicting the theme of the text by reviewing the title, the figures and what knowledge they

have about it. During the reading, it is determined if what is read is correctly understood and unknown terms and grammar rules are explained. After reading the text, evaluation activities can be developed, such as questions, writing similar texts or drawings, etc. (Navarro et al., 2012).

Teaching social skills. Taking into account the difficulties of interaction and social understanding and control of emotions in students with Asperger's Syndrome, strategies can be used that encourage the resolution of social problems, such as the story of a social history. Comedy programming can be used in English, that is, include audiovisual resources with material that includes conversations and everyday social behavior (Navarro et al., 2012).

Strategies or activities of English teaching more appropriate for children with Asperger's Syndrome

The education of English language with children with special needs.

The teacher who works with children with special needs must have knowledge related to linguistics and culture. Teachers may have difficulties regarding the correct evaluation of the needs of children with special needs in the classroom. Therefore, the understanding of the process of acquiring a second language, the influence of a native language on cognitive development, the relationship between the native language and English proficiency, and the impact of cultural differences on student performance, must be knowledge managed by educators (Park & Thomas, 2012).

According to Ortiz & Yates (2001) they state that teachers do not have courses or preparation programs related to special cultural and linguistic backgrounds. Due to the lack of instruction by teachers to the student population, there is evidence of the lack of proper certification in this area, with a serious shortage of teachers with adequate experience and qualifications.

Therefore, it must be taken into account that students with special needs can not reach high academic standards unless they receive adequate instruction and high quality services from their schools and teachers.(Ortiz & Yates, 2001).

It is considered that individuals with Asperger syndrome could be incorporated formally in the process of curricular adjustments, so that any student is unfairly excluded, and so that they can have a comprehensive, supportive and quality educational system that guarantees equal opportunities (M. A. Z. Montero, 2009).

Although a large number of scientific publications related to the pedagogical approach in children with Asperger's syndrome are not yet evident, Marín (2010) reported the use of the "Total Physical Response" Method for teaching English in a preschool child with Asperger's Syndrome. This method was developed by James Asher, a professor of psychology at San Jose State University of San Jose, California, in the 1960s (Marín & Arce, 2010).

Total Physical Response method (TPR)

The total physical response (TPR), unites the development psychology theories, humanistic pedagogy as well as the dramatic nature of languages learning. The main focus on TPR is based on the precise of new motor skills association in order to make the language learning easier. The teacher presents the language using commands which make his/her students carry them out in a group or individual way.

Concept. This method corresponds to a physical activity, which is suitable to be used on early ages. It outstands the importance of the hearing ability of the child, and from that moment on, children acquire the vocabulary they need in order to get their linguistic ability.

Characteristics. Exercises will be done to get physical response from students. The role of the learners is to listen to and to act out, recognizing combination of new elements simultaneously. The teacher's role is direct and active. He/she decides what to teach, he/she presents the pattern and new material, then, he/she picks out the material to be used. There's no basic textbook. The material and objects used are very relevant in this process. Some of these items are: photos, slides, billboards, etcetera.

Didactic strategies of the method. The teacher must know the important aspects which will be used with this method so that he/she may find a qualified and efficient learning. Using didactic strategies is very relevant since children learn easier while listening to a new vocabulary. Through this process children interiorize words in their minds, they match phonics, sounds and then, they go to another stage which is to talk what they have learned.

The techniques to be used in this method appear on figure 3.

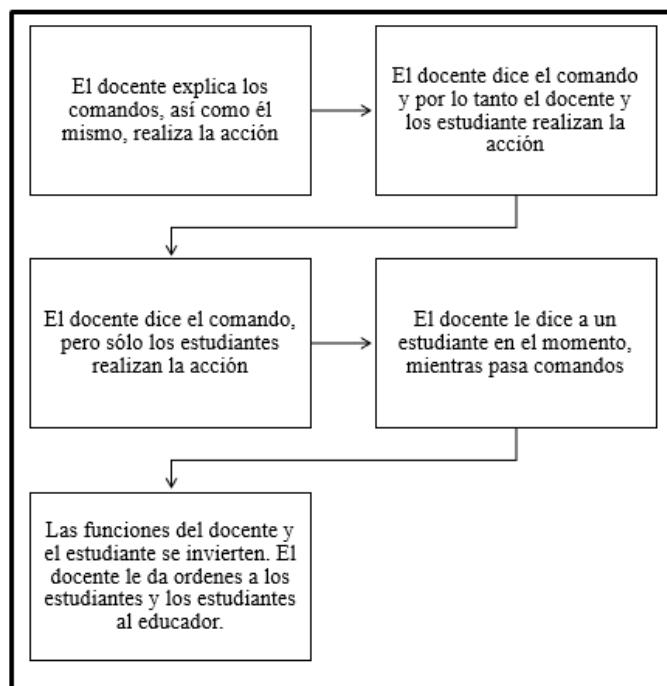


Figure 2. Work techniques with TPR method. Adapted from: Marín, 2010.

Another teaching method or strategy with Asperger's syndrome children, is Diaz' proposal (2014), which states that at the moment to satisfy children's needs it is vital to consider the following principles: 1). An adequate setting of the environment added to the advancement of their skills use to take them to success in the work with these children. 2). The support should be based on specific needs of each child, instead of general diagnostic. 3). According to the normativity for the attention of special educative needs, schools should give answers to this issue based on the stablished framework. (Díaz-Jiménez, 2014). Regarding the previous information, Diaz recommends the following interference characteristics:

Use of visual support in any teaching process. Individuals with Asperger's syndrome process the information much better when this is shown in a visual way. That's why is important

to use visual aids in any teaching process (lists, pictograms, schedules) which makes them comprehend what they are trying to learn. (Rojas & Ruiz, 2014).

To assure a steady and predictable environment avoiding unexpected changes. The difficulties to face new situations and lack of strategies to adapt to changes, demands to assure certain structured levels and predictability (anticipating daily routine changes, respecting some of the own routines of a person with Asperger's syndrome) (Rojas & Ruiz, 2014).

To assure paths to learn with no errors. A person with Asperger's syndrome, specially on their school age use to show low tolerance levels to frustration and this, united to perfectionist attitudes, may lead them to disruptive behaviors when they don't get the expected results in a task. To avoid this type of situations and stimulate the motivation towards the learning it is vital to offer all type of help needed to guarantee the success of the task done (Rojas & Ruiz, 2014).

To break down tasks step by step. The children with Asperger's syndrome have some limitations on their functions (related to face new situations), bringing obstacles to their performance during complex activities. To make up for these limitations is needed to structure the tasks and to break them down step by step in a sequenced way. (Rojas & Ruiz, 2014).

According to the information given above, the proposal of pedagogical intervention has the following items:

- **Task structures.** Sequence the tasks into pieces in order to make it easier.
- **Steps list.** It gives details of the steps in a summarized way. The aim of this items is make the child internalize the list, helping him this way to be more autonomous.
- **Visual organization of the work time.** To make a visual description of the tasks, activities the child must do. For example (See figure 4)

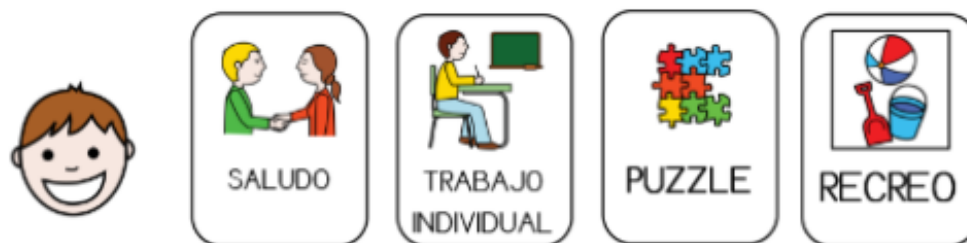


Figure 3. Methodology for children with Asperger's syndrome in childhood education.

Adapted from: Díaz, 2014.

- **Visual markers to manage the time.** In order to help the student with Asperger's syndrome to manage his/her time in each task or activity. This way, he/she can check his/her time remaining and regulate him/herself . For example (See Figure 5):



Figure 4. Methodology for children with Asperger's syndrome in childhood education.

Adapted from: Díaz, 2014.

Agenda management. It's important they learn how to use their agendas properly in which they make a To-do list. During this process they may have a classmate or partner who help them check their processes.

- **Promoting work-team.** To avoid feeling rejected by his/her classmates, it would be a good idea that the teacher create his/her groups. He/she gives the chance to choose those who have social abilities and empathy, who may interact with children with Asperger's

syndrome and be more patient with him or her, minimizing and avoiding misunderstanding and conflicts. (M. C. Montero, 2013).

- **Working individually the no-explicit rules and success of a team-work.** It's essential to foster the importance to listen to their peers, respect others' ideas, pay attention what it's been done, and raise his/her hand before talking. (See Figure 6).



Figure 5. Methodology for children with Asperger's syndrome in childhood education.

Adapted from: Díaz, 2014.

- **Using concept maps as organizers in recognition of the information.** This is very relevant for individuals with Asperger's syndrome. It will help them out organize concepts, arrange them properly and learn them in a meaningful way.
- **Making explicit the relation among contents.** It is convenient to name in an explicit way the resemblance, differences, parallelism or relationship between distinct types of information.
- **Using their subject of interest as much as possible.** To make their subject of interest the ally of the teacher.

Regarding language:

- **To use short and simple phrases to address other people with Asperger's syndrome.**

It's common to repeat the same idea over and over again, becoming an empty speech.

- **Give clear and brief orders.**

- **Use visual aids.** It's a very important strategy which should be applied continually. The audio information may be processed with difficulty, while the visual makes them feel confident and it's easier to be learned easily.

CHAPTER 5

DISCUSSION

After the bibliography search, including not only primary literature but also secondary, this research can be considered as the first literature review which describes the main methods and strategies of teaching English as a foreign language to children with Asperger's syndrome. This shows the need to set up higher studies on the education area which promotes to the understanding of the relationship between having this type of disorders of the autistic spectrum and the second language acquisition, as well as the techniques that may follow the educators to foster their students' development. The current literature shows that the factor of elements to take into account during the creation of educational strategies with these children, are related to the preparation the teacher has regarding the attractive curriculum design which make the student be motivated and adapted to their particular needs and create a cozy environment in the classroom, in which the child with this disorder may feel comfortable and acquire skills in the English learning process (Reppond, 2015). The Asperger's syndrome student has an average intelligence or above it. He seems to be able to do things by himself. Most of them are competent and may have wide information about a topic which can be extremely easy for them. However, they can show weaknesses related to the abstract thinking or comprehension as well as the social cognition. As a consequence, they may have some academic problems, especially with Reading comprehension, solving problems, organization abilities, development of concepts, and infer. Moreover, they have flexibility difficulties. In other words,

their thinking tends to be rigid. They also have difficulties to be adapted to the change, failure or frustration. They don't learn from their errors. (Attwood, 1998).

Although children with Asperger's syndrome generally speak fluently at the age of 5, they use to have problems with Pragmatic (The use of language in social contexts), Semantic (Not able to recognize multiple meanings) and Prosody (Tone of voice, stress and speaking rhythm). They may have a very advanced vocabulary and often speak with no stop about their favorite topic. The topic can be defined in a limited or restricted way and the individual has difficulties to change from one topic to another. Furthermore, they may have inconvenient with the rules of a conversation, they interrupt and talk about others' speech; they can make irrelevant comments or have difficulties to begin or end up a conversation. When they are teenagers, their talk may become arrogant or extremely formal. Social communication problems may be: To stare at others for long periods of time, stand very close to another person, to have not normal body pose, and they rarely understand facial expressions. Thus, some English teaching techniques are proposed for these individuals with special conditions. (Attwood, 1998).

In this study the TPR method was proposed as an strategy to make the foreign language learning easier, this time English, however, in the literature there have been found some disadvantages: There might be some students who don't have enough vocabulary to understand the program, these learners may feel unsteady in the traditional classroom and this method may be depressing for some students if the teacher is not familiar with this program. Despite these disadvantages, some work steps were explained with this technique, which may help to get a faster comprehension of the language, to keep a long term learning of this new

language, avoiding this way the distress of some students and teachers as well, besides stimulating the flexibility in the subject development (Marín & Arce, 2010).

Among the limitations of this monograph, it is essential to highlight that the purpose of this study is to describe generally what the strategies used from different authors are as well as how the English teaching as a foreign language with children with Asperger's syndrome can be for this population. This general description shows that in the literature there are a few studies which report development or educational strategies setting, and those who do it, are used with small samples, none applied in our region. Another limitation, is due to the inclusion of Spanish and English bibliographical material in both English and Spanish, probably keeping some other studies out which can offer extra findings to the topic. Considering these limitations, this study establishes a basic research line that may promote to the development of future qualitative studies of pedagogy or education on children with Asperger's syndrome in order to offer a foreign language teaching (Attwood, 1998).

CHAPTER 6

CONCLUSION

Despite little evidence in the literature about main methods for teaching English to children with Asperger's syndrome, the current strategies used for teaching English as a foreign language, are essential to make them adapt to the learning and comprehension with these type of kids in order to get a better English learning. These methods are classified in, special, present and classic, however, there are methods such as TPR, which needs higher setting through studies describe results with children with this syndrome in our population. These strategies may be used in our environment in order to apply real evidence in each student's case, taking into account the proposal given by Common European framework referenced (CEFR) for the development of skills (know how to do it) existential competence (know how to be) and learning ability (know how to learn).

Considering the findings on this literature review, it's vital to highlight that there is some evidence to begin the development of evaluation studies or educative intervention which allows to compare teaching techniques and methods of English language in order to identify what can be the most suitable ones for this children population.

This research has had a really considerable impact on the author which highlights the search of strategies and methods that guarantee an English education as a foreign language on children with a development disorder, being this disorder a characteristic related to the current educative proposals that must include childhood with diverse abilities and foster better educational spaces.

Special Analysis Summary (SAS)

Title: Methods and strategies of teaching English on children with Asperger's Syndrome.

Type: Monograph.

Line of research: The following monograph is focused on: "Childhood, Education and Diversity". This part of childhood recognition is considered as an essential stage of the human development, which can be influenced by factors both individual and social. This line establishes that each child has different types of abilities and all of them have the same right of education. So, it's proper to link this monograph to this line since it describes methods and strategies of teaching children with a disorder of his/her development, which gives a chance to foster the education on children with diverse abilities. This last part corresponds to one of the aims of the line which consists in: "Foster alternatives of building to strengthen educational space for childhood.

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Date:

Key words *English teaching, educational techniques, children, Asperger's Syndrome, Asperger's disease.*

Description: This report shows the results of the research as a monograph with the advisory of Mr Jairo Gutiérrez de Piñeres, registered on the research line "Childhood, education and diversity" which was based on narrative seeking of scientific literature using searchers focused on the identification of scientific articles to answer the research question: "What are the English

teaching methods and strategies for children with Asperger's syndrome". The articles were revised to evaluate its accuracy related to the General objective of this monograph. The writing of the Project of this research was divided into three parts: The first one is related to the approach of generalities on Asperger's syndrome, the establishment of English as a natural language and aspects about teaching-learning; the second one was based on the methodology used on the research development and the third one was focused on reporting the different techniques and/or methodologies that could be used for the teaching of English to children with Asperger's syndrome.

Sources:

Some primary resources were used to complete this research:

Reppond, J. S. (2015). *English Language Learners on the Autism Spectrum: Identifying Gaps in Learning*.

1. Marín, V., & Arce, T. (2010). *Utilización Método Total Physical Response para la enseñanza del idioma inglés en un niño preescolar con Síndrome de Asperger*. (Maestría en Administración Educativa), Universidad La Salle,
2. Montero, M. A. Z. (2009). El síndrome de Asperger y su clasificación. *Revista Educación*, 33(1), 183-186.
3. Montero, M. C. (2013). *Síndrome de Asperger: guía práctica para la intervención en el ámbito escolar*: Asociación Sevillana de Síndrome de Asperger.
4. Rojas, D. G., & Ruiz, A. P. (2014). *Una mirada a la realidad: propuestas innovadoras para favorecer la inclusión educativa*: Universidad de Castilla La Mancha.

5. Díaz-Jiménez, I. (2014). Metodología para niños con Síndrome de Asperger en Educación Infantil.
6. Ortiz, A. A., & Yates, J. R. (2001). A framework for serving English language learners with disabilities. *Journal of Special Education Leadership*, 14(2), 72-80.
7. Park, Y., & Thomas, R. (2012). Educating English-language learners with special needs: Beyond cultural and linguistic considerations. *Journal of Education and Practice*, 3(9), 52-58.
8. Willems, Y. (2016). *Aprendizaje de lenguas extranjeras por niños con el Síndrome de Asperger*.
9. Salluzzi, E. G. (2014). *La enseñanza de ELE y el Síndrome de Asperger. Individuación de las problemáticas y de las necesidades de un alumnado especial: propuesta didáctica*.

Methodology: A descriptive study (Literature review). This was divided into four methodological phases:

1) Seeking on available data base online of bibliography material about strategies and teaching methods of English on children with Asperger's syndrome; 2) Inclusion of material published in the last ten years; 3) Exclusion of studies with Autist spectrum different from Asperger's. 4) The acquisition and description of the information. Finally, the methods and strategies were classified by chapter and subchapters to be described in this study.

Conclusion: Children with Asperger's syndrome don't have any disturbance or cognitive alteration which may place them in a learning slowdown stage, however, they might have some difficulties if the psychosocial environment is not taken into account. Thus, the current strategies

used to teach English as a foreign language are essential to make learning adjustment and its comprehension in children with this development disorder, so that they can acquire a better English learning

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5. Szatmari, P., Bremner, R., & Nagy, J. (1989). Asperger's syndrome: a review of clinical features. *The Canadian Journal of Psychiatry, 34*(6), 554-560.
6. Reppond, J. S. (2015). English Language Learners on the Autism Spectrum: Identifying Gaps in Learning.
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