

UNIVERSIDAD HISPANOAMERICANA

FACULTY OF EDUCATION

THESIS SUBMITTED TO OBTAIN LICENCIATURA EN ENSEÑANZA DE INGLÉS

STRATEGIES FOR TEACHING GENERAL VOCABULARY IN
ENGLISH TO STUDENTS WITH AUTISM SPECTRUM DISORDER
FROM SIX TO EIGHT YEARS AT “INSTITUTO EDUCATIVO SAN
GERARDO” IN ALAJUELA DURING THE SECOND SEMESTER OF
2021.

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HEREDIA, COSTA RICA

JANUARY, 2022

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IV-SWORN DECLARATION (DECLARACION JURADA)

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Firma del estudiante

Cédula: 20742055

LETTER FROM THE TUTOR

San José, 3 de enero, 2022

Universidad Hispanoamericana

Licenciatura en la Enseñanza del Inglés

Estimados señores:

La estudiante Arellys Molina Guzmán, cedula de identidad número 207420550, me ha presentado para efectos de revisión a aprobación, el trabajo de investigación denominado: "Strategies for Teaching General Vocabulary in English to Students with Autism Spectrum Disorder from Six to Eight Years at Instituto Educativo San Gerardo in Alajuela During the Second Semester of 2021", el cual ha elaborado para optar por el grado académico Licenciatura en la Enseñanza del Inglés. En mi calidad de tutor, He verificado que se han hecho las correcciones indicadas durante el proceso de tutoría y he evaluado los aspectos relativos a la elaboración del problema, objetivos, justificación, antecedentes, marco teórico, marco metodológico, tabulación, análisis de datos, conclusiones y recomendaciones.

De los resultados obtenidos por la postulante se obtiene la siguiente calificación:

	Descripción	%	% Obt
a	Originalidad del tema	10%	10
b	Cumplimiento de entrega de avances	20%	20
c	Coherencia entre los objetivos, instrumentos aplicados y los resultados de la investigación	30%	30
d	Relevancia de las conclusiones y recomendaciones	20%	20
e	Calidad detalle del marco teórico	20%	20
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En virtud de la calificación obtenida, se avala el traslado al proceso de lectura

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VI-CARTA DE LECTOR

San José, 20 de marzo 2022

Universidad Hispanoamericana
Sede Llorente
Carrera

Estimado señor

La estudiante Arellys Molina Guzmán cédula de identidad 207420550 me ha presentado para efectos de revisión y aprobación, el trabajo de investigación denominado " Strategies for Teaching General Vocabulary in English to Students with Autism Spectrum Disorder from Six to Eight Years at Instituto Educativo San Gerardo in Alajuela During the Second Semester of 2021", el cual ha elaborado para obtener su grado de Licenciatura en la Enseñanza del Inglés.

He revisado y he hecho las observaciones relativas al contenido analizado, particularmente lo relativo a la coherencia entre el marco teórico y análisis de datos, la consistencia de los datos recopilados y la coherencia entre éstos y las conclusiones; asimismo, la aplicabilidad y originalidad de las recomendaciones, en términos de aporte de la investigación. He verificado que se han hecho las modificaciones correspondientes a las observaciones indicadas.

Por consiguiente, este trabajo cuenta con mi aval para ser presentado en la defensa pública.

Atte.



Firma

Nombre: Msc. María José Herrera

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Cordialmente,

A handwritten signature in blue ink, appearing to be 'Arellys Molina Guzmán', written over a horizontal line.

207420550

Firma y Documento de Identidad

DEDICATORY

I dedicate this work to my family that has been by my side during this process. To my mom Marianella and my dad Manfred whose words of encouragement have always followed me. My parents who taught me to fight for my dreams and goals, to be strong, brave, and to not give up when things are difficult. My mom who has always supported me when I need it, who has always taken care of me and has always tried to make me feel calm. I also dedicate this thesis to my sister Tatiana, who has always been opened to help and guide me when I have felt lost and frustrated, and who gives me the best advices. I am truly thankful for having you in my life.

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First, I would like to thank God for giving me life, health, and everything I needed to develop this research project. God has been my guide and strength in every step I have walked. I would also like to give special thanks to my mom and dad for giving me the opportunity to study and succeed and for always motivating me to do my best. Besides, I would like to thank my sister, for helping and supporting me unconditionally. Finally, I would like to acknowledge professor Roy Alfaro Alfaro for his help, guidance and willingness during this process.

ABSTRACT

This project investigates and analyzes different methods and strategies that help students with autism spectrum disorders learn vocabulary in English. The studied population was formed by students with autism spectrum disorders from six to eight years old that are part of first and second grades from the Instituto Educativo San Gerardo in Alajuela. Some of the strategies that resulted effective during this investigation are the use of visual aids, a timer, technology, and activities in which these students can create things by using different materials. There were also found some activities that are not effective with these students such as reading, copying and writing due to their motor skills problems.

RESUMEN

Este Proyecto investiga y analiza diferentes métodos y estrategias para ayudar a estudiantes con trastornos del espectro autista a aprender vocabulario en inglés. La población estudiada está conformada por estudiantes de entre 6 y 8 años pertenecientes a los grupos de primer y segundo grados del Instituto Educativo San Gerardo en Alajuela. Algunas de las estrategias que resultaron efectivas durante esta investigación son el uso de apoyos visuales, un cronómetro, tecnología y actividades en las cuales dichos estudiantes pueden crear cosas utilizando diferentes materiales. También se encontraron actividades que no son efectivas con estos estudiantes, tales como lectura, copiar o escribir debido a sus problemas con las habilidades motoras.

CHAPTER I
RESEARCH PROBLEM

1.1 ISSUE PROBLEM

This investigation is carried out with students with Autism Spectrum Disorder (from now on ASD) from six to eight years focused in their process of learning general vocabulary in English such as colors, shapes, numbers, family members, verbs, etc, at Instituto Educativo San Gerardo in Alajuela, during the second semester of 2021.

1.1.1 Background of the problem

English Teaching to students with cognitive disorders is a relevant topic for English teachers who are usually working with this population in their classrooms. It is also an interesting topic for people who believe that this kind of students are not capable of learning a new language.

According to Padmadewi,N. and Artini, L. (2017), nowadays there is an increase of the number of students with Autism Spectrum Disorder that have been included in regular classrooms and receive the same curriculum as the rest of their classmates. It has evinced the lack of preparation of teachers and schools with the appropriate material and strategies to offer these students the best education.

Padmadewi,N. and Artini, L. (2017), mention that parents prefer to enroll their kids in regular schools for them to be taught as mainstream students. The author considers that inclusion of ASD students in regular classrooms is a great benefit and may help improving values as tolerance, empathy, among others, but it is needed for them to always receive special attention and care. (p.160)

According to Padmadewi,N. and Artini, L. (2017), people at North Bali Bilingual School applied the method of a “shadow teacher”, and at the end of their investigation they found it was effective. It helped the ASD students included in regular classrooms to understand better what they were learning by receiving personalized attention, instructions, and resources. (p.163)

Adisti, A. (2019), mentions a study carried out at Talenta Kids School, located in Salatiga, Indonesia in which they applied comprehensive learning methods and therapeutic methods to teach students with autism spectrum disorder. People at this school emphasize in teaching based on the Total Physical Response method that allows students learn new vocabulary by moving, dancing, singing, playing, etc. It makes the learning process easier for students with special needs who need special attention and techniques. (p.22)

Adisti, A. (2019), believes that teaching English to students with autism is more important than just teaching a foreign language. Students with ASD have also their own potential to be developed. They just need the appropriate methods, techniques, and materials to achieve a good learning. (p.19)

Based on her observation Adisti, A. (2019), mentions that children really enjoy learning English when this method is applied. They enjoyed the different activities that were carried out during the class, students were a little more focused on their teacher, enthusiasm was part of the class, and verbal instructions invited children to be active learners. Children liked playing games and specially when teacher used media because it was interesting for them. Students with autism have troubles communicating with others but it does not mean that they cannot develop their English skills. The results of this study showed that they are enthusiastic when learning English through, the TPR method. (p.24) It is important for teachers to apply as many different strategies as possible with these students as they need them to catch their attention and keep focused when working in class. Students with autism spectrum disorders need to develop different tasks to identify which are effective for them. According to what Adisti, A. (2019) found when applying these activities, these students enjoy the process and feel motivated, which contributes to their learning. Besides, the use of games is also an effective strategy for students with autism spectrum disorders since they need to move and be active during the class. (p.24)

Moreover, the use of technology is a good tool teachers can apply, but it is really important to use it during short periods of time because it can affect the rest of the skills they should develop.

According to Sandra, L. and Kurniawati, L. (2017) they emphasize in the application of a different method called Differentiated Instruction Approach, which includes different techniques that involve these students' abilities and needs. They mention that this method can help both: teachers and students with autism spectrum disorder. (p. 165)

Sandra, L. and Kurniawati, L. (2017) mention that using differentiated instructions may help teachers improving their students learning process, especially when these students have different needs. Even though teachers have their own teaching styles and methods, they need to understand that sometimes when they have students with autism spectrum disorder, they may have to look for diverse strategies and change their teaching styles to help these students understand better what they are learning. (p.42)

As a result, they found that students with ASD had some troubles completing the same exercises that the rest of their classmates, because of anxiety and difficulty to focus. However, when teachers reduced the number of questions, for example, from 10 to 5, it was easier for them to focus and complete the activity. They felt confident and not forced. After analyzing those kinds of situations, teachers should understand the need of personalizing exercises and activities they apply in class for ASD students. Teachers should be aware of the different conditions these students have and even though they have autism spectrum disorders, they are completely different and what works for one of them may not work for the rest. As mentioned before, students with autism spectrum disorders need to feel relax in class and work in a good environment that benefit their performance.

1.1.2 Problematization

According to Russell. G, (2012) autism was not that common some years ago, but nowadays, as the educational system has been changing and developing and diagnostic methods to find this disorder have developed, the situation has change and students with autism spectrum disorder have been included in regular schools and this situation has forced teachers to look for the correct methods to face this challenge in the best way. However, according to (Finch et al., 2013) most of the teachers do not receive training and do not have the bases for working with these students in the same class as the rest of the students. It is worrying because sometimes parents get concerned because their kids are not receiving the special attention they need, or maybe they are being excluded because they do not receive any support, special material, or strategies from their teachers or the school. According to the Centre for Autism (2020) these situations provoke frustration and awful feelings in these students who do not understand what is going on around them and what they are doing there. They are trying to understand different and new information and they cannot deal with that; students get stressed and it can ruin their learning process and their attitude and motivation to go to school. (p.38)

Talking about English Teaching, there are students who have not had contact with English, so when they are taken to a regular school, with a lot of changes and they also start studying this language, it becomes an impact for them. That is when teachers need to be prepared to make this process smoother and easier but most of the times, they are not ready for it and learning is not as successful as expected.

1.1.3 Justification of the topic

The topic was chosen because of the need of including all students in the educational process. Among the years, disability has been a popular and controversial topic because the educational system of Costa Rica was not prepared to fulfill these

students' needs. Students with disabilities were taught in a separate classroom and there was a feeling of discrimination towards those students who were not involved as the rest of their classmates in the activities. This situation changed when society started including and giving the same opportunities to students with disabilities. That is why nowadays these students are included in the same classrooms as the rest of the students, and it represents an enormous challenge for teachers who need to be prepared for teaching all the students and achieve all the objectives established.

Due to this situation, it is considered that it is especially important for teachers to know and apply different strategies that can be adapted for all the students and their disabilities. In this case the author of this investigation wants to focus on teaching general vocabulary in English to students with autism spectrum disorder using different resources that can help these students in their learning process, making them feel included and comfortable in class. Moreover, it is believed that students with this kind of special conditions are incredibly creative, capable, and willing to learn; teachers just need to know how to broaden their minds and abilities.

1.2 FORMULATION OF THE PROBLEM

Which strategies influence the students from six to eight years with autism spectrum disorder vocabulary acquisition in English and are effective when including them in regular classrooms, and what is the impact these strategies have in this population at the Instituto Educativo San Gerardo in Alajuela?

1.3 OBJECTIVES OF THE INVESTIGATION

1.3.1 General objective

To analyze strategies for students with autism spectrum disorder from the Instituto

Educativo San Gerardo to learn general vocabulary in English by promoting equality and inclusion in class.

1.3.2 Specific objectives

- a. To investigate different ways in which students with autism spectrum disorder can learn a new language.
- b. To describe the strategies that help students with autism spectrum disorder learn general vocabulary in English.
- c. To apply different methods and strategies for teaching vocabulary in English to students with autism spectrum disorder including them in a regular classroom.

1.4 SCOPE AND LIMITATIONS

1.4.1 Scope

This investigation is carried out with the students with autism spectrum disorders that are part of the Instituto Educativo San Gerardo in Alajuela, Costa Rica. There is a small population of three students that are part of first and second grades of this institution during the second semester of 2021.

1.4.2 Limitations

This investigation is developed during a difficult health situation that the country and the entire world are going through, as it is the Covid-19. Due to this pandemic, the investigation process has been complicated because of the restrictions and changes that have been imposed. One of these changes, that has marked this

investigation, is the virtual education. The investigator has had reduced time to make observations, apply strategies, and interact with students with autism spectrum disorders in the classroom.

CHAPTER II
THEORETICAL FRAMEWORK

2.1 HISTORICAL CONTEXT

2.1.1 History of Instituto Educativo San Gerardo

The institution chosen for this project is called Instituto Educativo San Gerardo. The information provided about it has been taken from their official website. It is an open affiliation cooperative that offers educational services. It is integrated by parents, teachers, and administrative staff interested in being part of this educative project that grew like an alternative between public and private education. This educational center located in Pueblo Nuevo of Alajuela was founded when a group of people had the dream of creating a center to offer educative services. They joined their ideas and worked together to reach their goal and created La Cooperativa de Servicios Educativos de Alajuela, EDUCOOP on October 28, 1988 through a general assembly with the guide and support of INFOCOOP, the organization in charge of managing cooperatives. Finally, in March of 1989 they officially opened their institution, beginning in the garage of the founder's house, Ana Cecilia Rodríguez Quesada in Alajuela. The project started with 60 students distributed into four groups of different levels.

Nowadays, Instituto Educativo San Gerardo has around 76 members in the cooperative and more than 600 students between Pre- School, Elementary, and Highschool. Talking about the infrastructure, the Instituto Educativo San Gerardo is divided into three sections that include many classrooms equipped as necessary; pre-school and elementary areas which are located in the front and highschool area located in the back of the building. Furthermore, the school has enough restrooms, a cafeteria, administrative staff offices, a basketball field, and playgrounds. At this moment they are building a gym and a new building that will be destined to highschool classrooms. Moreover, the institution has a broad curriculum, which includes English, Art classes, Music lessons, Computer classes, Physical Education, Mathematical logic, among others and its methodology is

based on constructivism, promoting students' growth through experimentation, interaction, thinking, and creativity. Likewise, as a cooperative, they are focused on the full development of their students looking for a social change by educating the mind with values, humanity, and cooperativism.

2.1.2 Vision of Instituto Educativo San Gerardo

The vision of Instituto Educativo San Gerardo consists in being the best cooperative with a national impact which offers quality educative services with a lower cost to our members and customers.

2.1.3 Mission of Instituto Educativo San Gerardo

We are a cooperative company dedicated to education and personal growth of children, youngers, and adults that offers the best moral and spiritual values, based on a high degree of academic excellence, discipline, security, confidence, solvency, and transparency to benefit members, customers, and society.

2.1.4 Values of Instituto Educativo San Gerardo

This institution bases its believes in the following values: Humanity as it is an Institution that cares about the students' needs, their weaknesses and strengths to find the best methods to help them learn and succeed. Cooperativism, as the Instituto Educativo San Gerardo works under the modality of a cooperative, motivating and promoting team work to its community. Spirituality as they are devoted to Catholic religion and instill these believes to their students. Love as they promote this value in their students, their teachers, and administrative staff by trying to make everything with love. Finally integrity, as this institution works according to law, being responsible and honest in every thing they do.

2.2 LITERATURE REVIEW

2.2.1 Autism Spectrum Disorder in children

Nowadays, Autism Spectrum Disorder has been getting more common and it has provoked some people's interest in researching about this disorder, their signs, and treatment. According to Villegas, D. (2017) first descriptions about autism appeared at the beginning of the last century based on analyzed behaviors some patients with schizophrenia showed. The actual definition of Autism comes out from 1943 when Leo Kanner (1894-1981) analyzed a group of children from Milwaukee, United States because of their pronounced difficulty to communicate and interact with others. Diagnosing children with ASD is not easy for doctors and specialists and its early detection is crucial to establish their functional, social, and cognitive growth in the future (p.6). People with this kind of condition can experience a reduction of their intellectual and cognitive abilities but they can also show a greater development of some areas, for example math and arts skills (p.10). It is a common sign when teachers have autistic students that they do not communicate easily, they have troubles talking to others and expressing their feelings. According to Villegas, D. (2017), in the past it was the main characteristic specialists analyzed to find these disorders when autism was not that common. Nowadays it is easier to identify because people have studied and investigated more about this and there are tests that help the diagnostic. These students may experience lack of some abilities like communication, as mentioned before, socialization, and concentration. Moreover, they may also show developed skills like artistic abilities or ability with math, numbers among others.

Frank-Briggs, A. (2012), mentions that autism is characterized by a limited social interaction, issues related to verbal and nonverbal communication, repetition of activities and limited interests. "Autism is a pervasive developmental disorder which results in profound impairment of social interaction, communication, restricted and repetitive

behaviors. Symptoms usually start early, usually before three years of age.” (p.27) She mentions that autism affects many parts of the brain but people do not understand exactly how. It is a condition that everybody may have, it does not matter race, ethnic, groups and socioeconomic levels, the cause of each person affected is unknown, what is known is that there is not cure for it. There are different kinds of treatments, some of them include educational therapy, psychotherapy, drug treatment, among others. As mentioned before, autism can be identified by different symptoms and signs such as difficulty when interacting with others and communicating. It is often noticeable when they are between three and five years old. They have troubles making friends and sometimes can get aggressive. Autistic children may stop talking in the second or third year, they may just repeat some words and they do not share experiences or make requests. They can also present limited interests, atypical eating habits in some cases, rigid body language mostly in toddlers, and monotonous behaviors such as the repetitive behavior that categorizes autistic children as follows, the stereotype behavior that refers to purposeless movements, for example hand flapping, head rolling and body rocking. There is also a behavior called compulsive behavior that describes a person who does not like to be interrupted or shows resistance to changes. Besides, the ritualistic behavior that refers to an autistic child who has a established routine every day and repeats the same activities each time. They usually avoid eye contact and touching others, they also have defensive postures. The restricted behavior shows difficulty to focus, keeping interest or worrying about certain activities. The last characteristic is not the most common but can be present in children with autism. It is the self-injury behavior in which kids make movements that hurt themselves.

There are more signs that reflect autism but are unusual symptoms as the memorization of ordinary topics and showing awesome abilities and talents. Moreover, they can experience atypical eating behaviors and sleep problems with variations in their schedules when awakening and going to sleep. Factors that provoke autism have not

being discovered scientifically, studies indicate as possible causes mutations in several genes or environmental factors. Frank-Briggs, A. (2012), mentions some environmental aspects such as “certain foods, infectious disease, heavy metals, solvents, diesel exhaust, phthalates and phenols used in plastic products, pesticides, brominated flame retardants, alcohol, smoking, 26 illicit drugs, and vaccines” (p.28) Nevertheless, the theory about the effects of vaccines regarding autism has not been proved and causes controversy leading parents to not immunize their kids. Autism is also associated with some prenatal and perinatal risk factors including the parents’ age, low birth weight, short gestation periods, hypoxia during childbirth, and genetic disorders such as fragile X syndrome, Cohen syndrome, Tuberous sclerosis, Angelman syndrome, Down syndrome, Smith-Lemli-Opitz syndrome and mental retardation. Moreover, other factors that may influence are epilepsy and metabolic disorders. Frank-Briggs, A. also mentions some of the early signs children show that need to be evaluated by a specialist such as no babbling and no gesturing by 12 months, 16 months with no spoken words, not spontaneous phrases by 24 months, or loss of social and speaking skills at any ages.

Volkmar, F., Reichow, B. and McPartland, J. (2012) refer to the classification of autism spectrum disorders. The first category they mention is the Infantile Autism defined by Kanner as an inborn condition with a marked lack of interest from children in social environment and noticeable problems when communicating with partial or total absence of spoken language. (p.230) This is a marked characteristic with autistic students because they have not developed communicating skills. The second category they mention is the Asperger’s disorder describe as a condition in which “early language development seems normal but marked social difficulties (of the type seen in autism) develop, particularly with peers, and come to attention somewhat later in life than in autism. Circumscribed interests are marked, and are a source of disability.” (p.231) As Volkmar, F., Reichow, B. and

McPartland, J. (2012) mention, there are characteristics that are part of this second category that also show important characteristics that describe students with autism spectrum disorder categorized as Asperger, as difficulty with spoken language and social abilities and remarked interests in determined areas.

The next category is the Pervasive Developmental Disorder-Not Otherwise Specified or Atypical Autism in which “symptoms do not meet specific criteria for a PDD, but there are major social difficulties and problems in either restricted behaviors or communication of the type seen in autism.” (Volkmar, F., Reichow, B. and McPartland, J .2012, p.231) This is an easier and common diagnosis that reflects the potential, multifaceted and complex genetics of autism. This condition represents the largest part of autism spectrum disorder cases.

Moreover, there is another category called Childhood Disintegrative Disorder also known as termed Heller’s syndrome or disintegrative psychosis. Its main characteristic is the long period of normal development these patients experience for around 3 or 4 years. Then, they have a noticeable developmental deterioration in many areas leading to the common presentation of autism.

The last category is called Rett’s disorder, a condition essentially presented in women since men with this condition die before birth. “Very early development is normal, but then deteriorates with a striking clinical pattern including some social unresponsiveness (in the preschool years), motor and respiratory problems, seizures, and profound developmental delay.” (Volkmar, F., Reichow, B. and McPartland, J .2012, p.232)

2.2.2 Inclusion of ASD students in regular classes

The idea of students with special needs attending school in separate classrooms or being enrolled in special schools to receive an adequate education has changed through the passing of time. Parents, family, friends, and even teachers fought to include students with special needs into regular classrooms as a demonstration of inclusion and for

increasing respect for the rights they have. Nowadays, it is a reality and students with ASD and other special needs are included in regular classrooms and receive education in the same way the rest of their classmates do. They are part of the same curriculum and participate in the same activities, sometimes with some kinds of adaptations. Decristofaro, A. (2016), mentions that this general education curriculum can be adapted to the different needs the students with ASD have, but it depends on the severity of that disorder. Nevertheless, if students with autism spectrum disorder are part of a typically- developing students' classroom, they may have a good progress. (p. 7) The author mentions that collaboration is especially important when working with students with ASD to help them succeed. Parents have a vital role during this process, they need to work directly with their kids' teacher to share ideas and techniques that may be effective for these students.

This relationship between parents, teachers, and school administration is relevant to find the best ways to include students with ASD in regular classrooms. They should agree with the idea that both, school and home environments are important. (p.16-17) Decristofaro, A. (2016) mentions an effective method created by Simpson et al. in 2003 that helps teachers that are not trained to teach students with special needs achieving inclusion in a successful way. This method includes five important components as "modifications to the environment and teaching instructions, support, social support, coordinated team dedication, consistent evaluation of inclusion practices, and home-school collaboration." (Simpson et al., 2003, p.14) As it is known, autism spectrum disorder is a complex condition that needs the correct methods to make it manageable, this is why collaboration and support are significant in this method. When there is a team work between parents, teachers, and school professionals, it helps reducing teachers' stress when they share responsibilities and a positive impact is provoked in the educational process of these students.

Reagan, N. (2012) remarks some benefits that inclusion of students with autism

spectrum disorder may have. First of all, she mentions that social development increases due to the interaction with teachers and classmates. This area develops and students with ASD show an improvement in their communicating skills. Reagan, N. (2012) emphasizes in the importance this opportunity to interact has for students with disabilities and how they need it. According to Reagan, N. (2012) when students with autism spectrum disorder are just enrolled in segregated schools where only interact with students with disabilities, they are learning just from their disabled peers rather than non-disabled peers. They do not learn the proper behaviors because they see only extreme manners and do not have an appropriate guide and model. Reagan, N. (2012) mentions that this inclusion not only benefits students with autism spectrum disorder, but also the rest of the students without disabilities because they are exposed to classmates with a variety of temperaments and conditions. She remarks that if a student with ASD is enrolled in a segregated school, it should be an excellent center where teachers are prepared with the greatest techniques and methods to offer their students the best opportunities. It should be also an innovating school that is constantly looking for new ways to manage the most difficult cases of ASD.

Reagan, N. (2012) also refers to other important benefit of including students with ASD in regular classrooms. School is not only a place where students learn contents, they are also taught knowledge, values, moral, and skills they will need during their day by day, and they learn and practice all of these relevant things with their classmates. This information demonstrates that students with special needs really gain, strengthen their abilities and get a significant advance in their personal educational goals when being included more than when being part of segregated schools.

According to Reagan, N. (2012), there are some effective ways to help students with ASD being included in regular classrooms. One of them emphasizes in a stimulating environment in which they can see posters, pictures and art works they made and also talk based teaching. Moreover, it is especially important for these students to have prepared

teachers, trained for teaching children with special needs, as autism spectrum disorder, mainly at present that many students are included in general schools. Teachers need to be ready to face this new reality and be understanding to these students. As mentioned before, collaboration between all parts involved to the educative process of a student with ASD (family, teachers, professionals and specialists, and school personnel) is relevant and crucial. The author mentions:

The collaboration needs to be there so that everyone can work as a team keeping consistency when dealing with behaviors as well as other methods in teaching students with ASD. Therefore, the child with autism will learn what is expected of them throughout their education and other aspects of their life in terms of how to behave. (Reagan. N,2012, p.11)

Other important factor Reagan, N. (2012) refers to, that benefits inclusion of students with autism in regular classrooms, is the relationship between teacher and student. It is not easy for these students to understand their environment and people around them, and the same happens when teachers do not understand what children with ASD want or feel. That is the reason why teachers need to work hard and form that successful relationship by earning the trust of these students. As it is known, people with autism spectrum disorder have troubles socializing, understanding and making relationships, so this aspect is essential for them to feel comfortable in class.

Chaaya, R. (2012) mentions some relevant factors of including students with ASD in general classrooms:

...students with autism will have the opportunity to interact with other students and practice their social skills, such as maintaining eye contact or conveying their thoughts and feelings. Despite their

impairment in social skills, they are like all children who want to be around others and would benefit from developing meaningful friendships. (Chaaya, R. 2012, p.10)

According to the author, when students with ASD are included in general classrooms, it improves their self-esteem because they feel part of a group and it motivates them. Moreover, by including these students with special needs, the rest of the students in the class may develop a positive attitude towards this condition that sometimes it is a taboo topic in society with uninformed ideas that are transmitted to our children. Their classmates even place their peers with ASD as the favorite children of the class or the most popular, they create important bonds that support the students with special needs.

Besides, as the author mentions, inclusion may contribute to better behaviors from children with ASD in public environments, than when they are part of segregated schools. Being part of regular classrooms encourage students to learn and repeat positive behaviors from their peers, improve their scores and increase the academic success.

Chaaya, R. (2012) also mentions that some studies that have showed some negative effects of this inclusion in students with ASD, as they can fall behind their classmates academically, pay less attention to their teachers in class, present troublesome behaviors, demand more time and attention from teachers, and have less interaction and developing of their social skills. However, the effectiveness of the class with students with ASD will depend on the strategies and methods the teacher applies for them to succeed.

2.2.3 Teachers' role

When students with ASD attend regular schools, teachers have a relevant role during their learning process, because they are their guide, support and the professionals on charge in this moment. Family and teachers are responsible of giving them the best opportunities to be successful students. According to Chaaya, R. "the teachers'

responsibility is to create access to learning through accommodations and increase their efforts to ensure the success of their students with disabilities. (p.14)”

Galazka, A. and Dick-Bursztyn, M. (2020) mention that nowadays inclusive education should accomplish the right of children with ASD to be active members of the school by participating and acquiring new contents. Teachers should use different techniques to teach these students and adjust to their needs and what they demand. They say that some teachers and special educators are better prepared to work with autistic students because they have more and effective tools than teachers that have no the information to work with this population and go through very stressful situations where they are asked to do it with any appropriate training about special education.

Uithayakumar, N. and Mat Rabi, N. (2020) made an investigation based in what teachers need or should have to include students with special needs in regular classrooms. Through studies, observations and interviews made to some teachers that, like many other teachers, have worked with autistic children without being prepared to do it they could wrote about their results. At the end of their investigation, they found out that teachers should have a minimum of three years of teaching experience before working with a student with ASD to gain knowledge, get practice and develop their skills. Besides, teachers need to feel comfortable and prepared with strategies and methods to develop with these students “including strategies for applied conduct examination, naturalistic learning, spontaneous educating, confident innovation, socialization, correspondence, consideration, adjustment of the environment, language intercessions, appraisal, and the viable utilization of information accumulation frameworks.” (Uithayakumar, N. and Mat Rabi, N. 2020, p.835)

Teachers also need to know the classification of the disorder their students have to feel well prepared to deal with it. According to the authors, this aspect is important and empowers teachers. They also mention that it is relevant for teachers who teach students

with autism to receive the adequate training from the school. It may help teachers to accommodate children with ASD in their classrooms in the best ways. The authors suggest that special education teacher training programs must be included in the schools and evaluate the needs teachers have, to adequate them correctly. They also mention that undergraduate programs of special education teacher training should include more practice. They recommend that schools accept students with autism only when they are fully prepared and trained to educate these children. The school must offer the training for the school personnel providing them with techniques to handle autistic students in the best way. "Not only training, the school has to have necessary facilities in the classroom and around the school for these special children who are autistic. (p.836)"

Lopes, A. Dreux, F. and Fernandes, M. (2014) show the process and results of an investigation they carried out in which they elaborated a questionnaire to interview teachers with the purpose of knowing their point of view towards working with children with ASD. The questions that were part of the questionnaire were based on the symptoms and behaviors of autistic children. "This result and the answers by the teachers of the present research show that the inclusion of students with ASD in the regular educational system is possible and that the social development is the main topic. (p.175)" Teachers mentioned some attitudes students with autism showed, for example they presented more cooperative actions than the rest of the students that do not have special conditions. The authors of that study make reference to the lack of opportunities these students have because of the disorders this spectrum include, like behavior, communication and social development troubles, and the need of specialized teachers. According to the authors:

...the inclusion of ASD students is possible because there are positive answers about it. However, the schools need structure, the professionals must be adequately trained and the support by the multidisciplinary team is fundamental. Besides that, there must be continuous support and monitoring of the inclusion

process. (Lopes, A., and Miranda, F., 2014, p.175)

They mention teachers think they effectively contribute with autistic students to help them develop their neuro psychomotor and learning areas as well as the social skills. Authors indicate that in another study they found out that some teachers consider the school as an environment for autistic students just to socialize. It showed lack of interest and hope in school as an opportunity to broaden and develop the rest of the skills these students have.

Another study of these author established the influence teachers have on the communication of this students. It emphasizes in the important role of the teachers for their impact they mark in the students, trough the interaction they manage from the autistic children and their classmates and support they give them all times. However, the results of all the studies, interviews and investigation the authors made, demonstrated the same point of view and disagreements teachers have related to teaching students with ASD:

The perspective of these teachers that have children and adolescents with ASD in their classrooms is that they miss more knowledge about the disorder, more training and support by other professionals. They also report difficulties in choosing the contents, the assessment tools or criteria and lack of technological support and infrastructure. The teachers do not believe they are well prepared to receive students with ASD in their classrooms. They need more specific training and knowledge about ASD and its characteristics. According to the results of this research the teachers have shown to be unprepared to work with inclusion and what to do with their students with ASD. (Lopes, A., and Miranda, F., 2014, p.176)

They all agree in the urgent need schools have to receive special trainings, have the tools, technology, infrastructure, and support from specialists required to offer these students the best opportunities.

2.2.4 Strategies for teaching English vocabulary to students with ASD

Over time, it has been established that every person around the world has the right to receive education, no matter the social status, gender, race, and any other condition. It also includes children with disabilities. As the rest of the children, they deserve to receive a good education with adaptations when needed to achieve their goals. In Costa Rica, people with disabilities are supported by a law called 7600, published in La Gaceta N° 102 of May 29th in 1996 established in the Constitución Política de Costa Rica, in which there is a list of articles that mention the different rights and accommodations these students should have and that must be fulfilled by every educative institution in the country, public or private, without being prohibited by anybody.

English is not an exception as part of the curriculum that every student has the right to be part of. It is demonstrated that students with disabilities have the capacity to learn a different language than their mother tongue. According to Rezvani, M. (2018) students with autism have the skills to learn a new language but due to their disorder, it may take more time than a student without special conditions. They mention:

Numerous of researchers ...have also pointed to the importance of provision of sufficient amount of input and repetition of lessons for L2 language learning. This is specifically vital in case of students with autism since they have concentration and verbal production problems, so the amount of sensory input and repetition of lessons are critical in teaching English language to them. (Rezvani, M. 2018, p.19)

Repetition is relevant when teaching kids but even more when working with students with autism spectrum disorder because they need to hear and repeat to understand and learn.

According to Galazka, A. and Dick-Bursztyn, M. (2020) children with ASD

despite they have troubles communicating an understanding, they are able to identify different words, understand their meanings and apply phonetic rules. Even though they have problems when socializing and speaking to other people, they may also have advantageous strengths that can help when they are learning a new language as brilliant knowledge or special skills in certain areas like mathematics, geography, among others. Galazka, A. and Dick-Bursztyn, M. (2020) mention that from every ten children with autism, one presents these special skills and interests. Another advantage may be their considerable interest and good memory for: word strings (e.g. movie scripts), visual and spatial information (e.g. maps), music and rhythm. Other specific interests may include: interest in flags, clocks, maps, calendars, cars and trains. (p.193) Based on the information they provide, learning English can meaningfully help students with ASD by increasing their social skills along with the teachers' support and motivation.

Some professionals have studied and researched about different strategies and methods teachers can apply when teaching students with autism and that are very helpful. They have observed their behaviors and how they react to certain techniques. Hilyati, A. (2013) mentions that a kid can learn to read faster if he or she can speak first the new language. They need to have an idea of the new words in their minds before trying to read it. He remarks three important aspects when learning a new language: listen, repeat and memorize. It makes sense and is needed, even when adults learn a new language, this is an important technique. As Hilyati, A. (2013) mentions, humans' brain needs to be prepared to the information it is going to receive. Repetition is an important method specially when working with kids. They need to listen to the words as many times as possible, so they start repeating them and finally memorize them, this is the process.

Following this technic, teachers for example should play a song, video, tell a

story using the words or show pictures of the vocabulary that is going to be learned by the students and repeat the words aloud for them to feel familiarized with the words. Then they may start repeating and memorizing the vocabulary having an idea of what the words are before.

Szymkowiak, C. (2013) also mentions some strategies that can be effective with these students. The author suggests partnering up the ASD students, but recommends to be careful when choosing the partner because he or she should be a mature student, who understands the situation and is open to be patient at every moment while working with the autistic child. Moreover, teachers should consider the use of the visual aids as they are very useful and helping for autistic children “because they may have missed the verbal instructions while they were focusing on self-organization tasks. The teacher should speak reasonably slow, avoiding multiple instructions in a row.” (Szymkowiak, C. 2013, p.14). It is recommended to use a routine with students with ASD by applying the same daily greetings with the use of visual helpers, and clear instructions and rules in the class in order to help them control anxiety, that is a common symptom in these children. The author also recommends to motivate the autistic students in front of the class when they are obsessed with a special interest, teachers should encourage them to show their work. It may make them feel inspired, included and an important part of the class.

Szymkowiak, C. (2013) also mentions other strategies, for example the use of color codes, schedules and organizers as the autistic children have problems when organizing and it can be helpful. (p.14) One example for color codes can be the use of specific colors for notebooks, books or folders in each subject, for example that all the class uses orange for English notebook, it will be effective for students with ASD and they would feel included. Another common symptom in autistic children is the motor skills difficulty that is noticeable when they try to write or make something with

their hands. It is suggested to use a special software that recognizes sounds, so they can speak what they want to write and the software turns it into text. (p.15) It is relevant to mention that nowadays technology offers many useful tools that support these children and are very effective, but they do not replace simple things teachers can create in an easy way that also work for them. Moreover, there are recommendations for teachers when assessing students with ASD, for example, avoid questionnaires or practices with open-ended questions. Instead of them, teachers should use multiple choice or fill in the blank questions in order to show exactly the students' understanding of the topic they are learning. (p.15)

Furthermore, other strategy that can be applied with autistic students is to use a visual timer when they are working in a homework. It may be helpful for them to control their anxiety and to keep focused to complete the task as they get stressed when having a homework. When the timer stops the student will be done with the homework, no matters if he or she could fully complete it.

Besides, when the teacher is giving instructions to the whole group, it may be helpful the use of simple vocabulary as it benefits autistic students' comprehension. Then, the teacher should give some extra time and support to this student to verify if the instructions were clear for him or her. It is also suggested that teachers instruct and motivate autistic students to make things by themselves and make them feel they have the same capacity as the rest of the students. Things such as making lines, participating in class and in daily routines, going to one task to another, among others, are things these students can do and teachers should encourage and support them at every time.

As mentioned before, aspects as using visual helpers, colors to organize things, schedules, clear and short instructions, and the teacher's guide at all times may help the autistic students feel more confident and prepared when attending

school and being part of a regular class.

2.2.5 Strategies to handle students with autism spectrum disorder

As previously stated, autism spectrum disorders are described by Lindgren, S. and Doobay, A. (2011) “as a group of neurodevelopmental disabilities defined by significant impairments in social interaction, deficits in communication, and the presence of rigid behaviors and restricted interests. (p.4)” Children with autism have different styles and rhythms for learning as well as diverse ways of thinking and developing skills. These skills can be gifted or severely limited. It is mentioned that the characteristics of a child with autism spectrum disorders may appear from the age of three years old and it completely challenges and changes the person’s and family’s lives. It is also proved that “ASD occurs in all racial, ethnic, and socioeconomic groups and is at least four times more likely to occur in males than females” (Doobay, A. and Lingren, S., 2011, p.4)

Further to the previous information, there are categories that establish autism spectrum disorders and even though they share some characteristics, they can vary in time the signs begin, the severity of the symptoms, and the accurate patterns of these problems. The authors mention that the early interference is crucial to find the best treatments in children with autism and get good effects. Doobay, A. and Lingren, S., (2011) refer to some “red flags” that children may show that should alert parents such as:

Repetitive use of language, little or no eye contact, lack of interest in other children, lack of spontaneous or make-believe play, persistent fixation on parts of objects, poor response to his/her name, fails to imitate caregivers, motor mannerisms (e.g., hand-flapping), fails to point or show joint attention. (Doobay, A. and Lingren, S., 2011, p.7)

The correct treatment and techniques applied for children with ASD like an appropriate diagnosis at the beginning to find out the precise needs and strengths they have will be elemental and beneficial for these children. Doobay, A. and Lingren, S.,

(2011) state that:

There are no specific medical tests for diagnosing autism although there are genetic tests for some disorders that may be associated with behaviors on the autism spectrum. An accurate diagnosis is based on systematic interviewing, observation, and assessment of the child's communication, social interaction, behavior, and developmental level. In addition to assessing the key symptoms of autism, a review of sleep, feeding, coordination problems, and sensory sensitivities is often recommended. Medical factors that may be causing pain or irritability should be recognized and treated whenever possible. (Doobay, A. and Lingren, S., 2011, p.7)

While it is true that there have not been discovered the factors that may provoke autism, Waqar Azeem, M. Imran, N. and Khawaja, I. (2016) remark that the National Institute for Health and Care identifies some risk factors such as “sibling with autism, parental history of schizophrenia or affective disorder or any other mental disorder, male gender, low birth weight, maternal age older than 40 years, and paternal age between 40 and 49 years. (p.59-60)”

Myers, S. and Plauche´ Johnson, C. (2015) define some strategies to manage children with autism spectrum disorders in an appropriate way. One of these techniques is the application of behavior analysis that “is the process of applying interventions that are based on the principles of learning derived from experimental psychology research to systematically change behavior and to demonstrate that the interventions used are responsible for the observable improvement in behavior.” (Myers, S. and Plauche´ Johnson, C., 2015, p.1164)” This method is applied to keep or improve some wanted behaviors in autistic children, or to teach them new abilities and promote behaviors in new environments and circumstances. “ABA focuses on the reliable measurement and

objective evaluation of observable behavior within relevant settings including the home, school, and community.” (Myers, S. and Plauche´ Johnson, C., 2015, p.1164) They state that children who have been treated with this method, show an important increase in their academic, language, social, and adaptive areas.

Besides, other technique is the structured teaching method that “emphasizes structure and has come to be called “structured teaching.” Important elements of structured teaching include organization of the physical environment, predictable sequence of activities, visual schedules, routines with flexibility, structured work/activity systems, and visually structured activities. (p. 1164)” This method remarks the importance of making changes in the environment to adapt it to the autistic children as well as improve their skills. The authors mention that this method has provoked fulfillment in parents as it has improved their teaching abilities and also has shown excellent results in children with ASD and their development. Nevertheless, this method has shown more effectiveness when it is applied individually at home than in a group.

The next strategy is called Developmental Models which “are based on use of developmental theory to organize hypotheses regarding the fundamental nature of ASDs and design approaches to address the deficits. (p.1164-1165)” This method has been applied and effective in both environments: at home and at the school. It is proved that this technique improves cognitive, play, motor and social skills more than what expected.

There are being applied:

...play sessions and other strategies that are purported to enhance relationships and emotional and social interactions to facilitate emotional and cognitive growth and development and therapies to remediate “biologically based processing capacities,” such as auditory processing and language, motor planning and sequencing, sensory modulation, and visual-spatial processing. (p.1165)

The authors also mention the Speech and Language Therapy, that results very

effective due the deficit autistic students present related to their verbal and communication skills. Most of the children with ASD “can develop useful speech, and chronologic age, lack of typical prerequisite skills, failure to benefit from previous language intervention, and lack of discrepancy between language and IQ scores should not exclude a child from receiving speech-language services. (p.1166)” “The use of augmentative and alternative communication modalities, including gestures, sign language, and picture communication programs, often is effective in enhancing communication. (p.1166)”

Other method is the Occupational Therapy and Sensory Integration Therapy which: ...is provided to promote development of self-care skills (eg, dressing, manipulating fasteners, using utensils, personal hygiene) and academic skills (eg, cutting with scissors, writing). Occupational therapists also may assist in promoting development of play skills, modifying classroom materials and routines to improve attention and organization, and providing prevocational training. (p.1166)

The authors emphasize in the sensory integration that is also used as part of the therapy with children with ASD. Its objective is to remediate needs and deficits these children have in their neurologic processing by including more experiences that allow them to integrate with their environments.

The last technique mentioned by these authors is the Social Skills Instruction. “Joint attention training may be especially beneficial in young, preverbal children with ASDs, because joint attention behaviors precede and predict social language development. (p.1165)” It is demonstrated that joint attention and symbolic play skills can be taught and simplify to vary situations and people. Even families can develop joint attention and other experiences of interaction during the child’s day and routine. “Social skills groups, social stories, visual cueing, social games, video modeling, scripts, peer-mediated techniques, and play and leisure curricula are supported primarily by descriptive

and anecdotal literature, but the quantity and quality of research is increasing. (p.1166)”

There are lots of resources related to this method that are available for teachers and parents to apply with these children.

2.3 CONCEPTUAL FRAMEWORK

2.3.1 Autism spectrum disorder

There are many definitions for this concept that describe their main characteristics and important aspects. It is important for people to really know what it means and to understand it. According to Pennington, M. Cullinan, D. and Southern, L. (2014) autism spectrum disorder (ASD) refers to a group of pervasive neurodevelopmental disorders that involve moderately to severely disrupted functioning in regard to social skills and socialization, expressive and receptive communication, and repetitive or stereotyped behaviors and interests. (p.1)

2.3.2 Spectrum

As Mohammad, E. Fatimah, A. and Al-Naimat, N. (2019) mention the word "Spectrum" refers to a series of syndromes and stages of detriment that can be experienced by children with autism. (p.48) This is an open concept that involves different conditions and symptoms that have been studied through the years.

2.3.3 Disability

According to Kazou, K. (2017) The International Classification of Functioning (ICF) describes disability as the multi-dimensional and interactive experience of a wide range of difficulties in functioning; in particular, these difficulties include impairments, limitations in performing activities and restrictions in participating in life situations, and arise out of the complex interaction between health conditions, personal factors and barriers in the physical and social environment. (p.26) Teachers must understand this concept and

should be attentive when working with a student with disabilities to help him or her fulfil the special needs she or he has in the best way by providing the appropriate techniques and strategies.

2.3.4 Inclusion

According to Braunsteiner, M. and Mariano-Lapidus, S. (2014)

The term, inclusion, particularly in the educational setting, is still based on a deficit view. Perceptions of 'dis'-ability create barriers to true inclusion and are often reinforced through higher education training programs. To promote inclusive values, acceptance of individual and cultural differences must be included in all curricula, not solely within special education. The future of a truly inclusive education relies on a cultural shift that supports and nurtures differences, and views success through a lens not focused on standardization but on diversity. The Index for Inclusion (The Index) has been utilized worldwide to support schools, to remove perceived barriers and to establish increasingly inclusive school cultures and practices. The Index aids in the creation of a culture that is dedicated to identifying and reducing barriers to inclusion and increases the learning and participation for all students. (p.32)

2.3.5 Human Development

According to Browne, E and Millington, K. (2015) this is a process of enlarging people's choices by building human capabilities to lead lives that they value.² This involves the capability to lead long and healthy lives, to be educated, to access resources and social protection, and fair employment. As such, human development is also fundamentally concerned with human rights, including those to life, health and wellbeing. (p.2)

CHAPTER III

METHODOLOGICAL FRAMEWORK

3.1 TYPE OF INVESTIGATION

According to Nassaji, H. (2015),

The goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data. (Gall, Gall, & Borg, 2007). In such research, the data may be collected qualitatively, but it is often analyzed quantitatively, using frequencies, percentages, averages, or other statistical analyses to determine relationships. (Nassaji, H., 2015, p. 129)

The study of autism spectrum disorder, a phenomenon that was discovered some time ago and studied for many years, its characteristics and the ways in which autistic children can learn a new language such as English, no matters their condition. The authors' main goal is to investigate deeply the different methods and techniques some experts have discovered and tried before with these students that have been effective and helpful for parents, teachers, and mostly for autistic students, by helping them make this process easier and manageable. The author wants to apply these techniques in order to analyze their effectiveness and results with autistic children from six to eight years old that are part of regular classrooms.

These results are analyzed by using different instruments that will help categorize them with percentages and numbers to better understand what works and should be preferred applied.

3.1.1 Purpose

According to Barrantes, R. (2013) the applied research's goal consists in solving practical problems in order to transform the conditions of a fact that we are worried about. An investigation can be defined as applied research because it is focused on finding solutions for problems that are part of everyday in a certain area, place, company, institution, community, group of people, or study field, by taking actions and following steps provided by the information produced during the investigation.

The objective of this investigation consists in finding the best strategies that can be applied with students with autism spectrum disorder to help them learn vocabulary in a new language such as English. Learning a new language is not easy, especially for students with special needs who need different methods and support to achieve this goal. That is why some professionals and experts have observed and investigated strategies to make the learning process easier for these students.

The author of this research focuses on these strategies to create plans and methods based on all the information that has been studied to apply them in order to observe the students' reactions when learning vocabulary in English with these methods and analyze the results obtained. In this way, the author works with the resources that already exist to promote inclusion and opportunities for every student, no matter their special conditions and contribute with these situation autistic students and their families face every day.

3.1.2 Temporal dimension

According to Barrantes, R. (2013) a transversal investigation studies aspects of the people's development and topics during a specific moment. It is focused on the investigation of a topic in a deep way but in a short period of time in a certain moment. Its main objective is to analyze the topic in detail and not the way in which the problem behaves through the time.

This investigation is transversal research because it focuses on the study of strategies that help students with autism spectrum disorder learn English, no matters the specific time in which they are learning. The author first investigates deeply about this disorder to understand better how these students work and what they need. The author studies the categories in which autism spectrum disorder is divided and then the methods and strategies some experts have investigated that are useful when teaching English to autistic students.

Nevertheless, this research project is not focused on studying how autism spectrum disorder has been investigated since it was discovered. Its goal is to work during the second and last quarters form 2021 with the students with autism spectrum disorder from first to second grades by applying methods and techniques that can be effective for them to learn vocabulary in English. After adjusting these methods and techniques that have been investigated and applying them, the author wants to be centered in the results she can observe and analyze them deeply in order to verify if the strategies applied work or not, and justify from her perspective the positive and negative aspects that led to these results.

3.1.3 Frame

The objective of a micro investigation is to analyze deeply a specific problem in a small group or population. This investigation can be defined as a micro investigation because is centered in a small group of students between 6 and 8 years old from the Instituto Educativo San Gerardo in Alajuela who have autism spectrum disorders. The author investigates specifically about methods in which these students can learn vocabulary in English in an appropriate way, in order to apply them and observe how they react to these activities and the results that are analyzed are based just on this population.

3.1.4 Research approach

According to Hernández, R. (2014) qualitative research is guided by areas and important topics of investigation. However, instead of getting the hypothesis and clarifying the questions after collecting and analyzing data, the qualitative researches can develop hypothesis and questions before, during, or after collecting and analyzing data. These activities often work first to discover what the most important questions of the investigation are and then to perfect and answer them.

Hernández, R. (2014) also mentions that every individual, group, or social system has a unique way to see the world and understand situations and events, which is built from their experiences, and through the investigation we should try to understand it in its context. The qualitative investigator uses techniques to collect data, such as the non-structured observation, open interviews, documents review, group discussions, personal experiences' evaluation, life stories register, and interaction or introspection with groups or communities. The qualitative approach

mainly looks for the spread or expansion of the data and information.

This investigation is defined as qualitative research because the author will observe the chosen group of students and asks different questions about the way they behave when applying the techniques and methods. Based on the observations and other different instruments that are used, the author finds results through the investigation and will have the opportunity to make changes and adjust the strategies to get better results and expand the information.

3.1.5 Character

This investigation can be defined as descriptive research. According to Hernández, R. (2014) the descriptive research's purpose is to specify important properties and characteristics of each phenomenon that is analyzed. Moreover, it describes trends of groups or populations. Frequently, the investigators' goal consists in describing a phenomenon, situations, contexts, and events by detailing and describing how they are and how they manifest. With descriptive investigations the researchers look for specifying the properties, characteristics and profiles of people, groups, communities, processes, objects, or every other phenomenon that is subjected to analysis. It means that it just pretends to measure or collect information about concepts or variables included, in an independent or combined way, in other words it is not pretended to explain how they are related.

Hernández, R. (2014) mentions that descriptive researches are useful to show precisely the dimensions of a phenomenon, event, community, context, or situation and the investigator must be capable of defining or visualizing what will be measured (concepts, variables, components, etc.) and about who will be the data

collected (people, groups, communities, objects, animals, facts). The description may be more or less deep, although in both cases it is based in the measurement of one or more attributes of the phenomenon of interest.

3.2 SOURCES AND SUBJECTS OF INFORMATION

3.2.1 Subjects

In this project the author is focused on working with students with autism spectrum disorder that are part of the population of the Instituto Educativo San Gerardo located in Alajuela. They are between 6 and 8 years old from first and second grades. These students, like most of the students with ASD in Costa Rica, have been included in regular classrooms where they are part of the same curriculum as the rest of their classmates.

These students have different autism characteristics and deficits such as motor skills and communication problems, difficulty when paying attention and working individually. That is why the author will apply different strategies to observe how they react and what benefits them when learning vocabulary in English.

3.2.2 Sources

To develop this investigation project, the author is going to use primary and secondary sources such as books that explain important concepts. Moreover, the author uses articles taken from magazines that also explain relevant information related to the topic that has been developed. Finally, the author also uses thesis that provided information based on studies and researches about autism spectrum disorders.

3.3 POPULATION AND SAMPLE

3.3.1 Probabilistic or no-probabilistic

This investigation is categorized as no-probabilistic research. According to Hernández, R. (2014) in no-probabilistic researches the election of the elements does not depend on probability but the causes related to the characteristics of the investigation or purposes of the investigator. The procedure is not mechanic and it is not based on probability formulas, it depends on the process of an investigator or group of investigators to make decisions and the selected proofs obey other investigation rules.

For this investigation the author chose a small part of a big population that face some troubles when learning a new language because of the lack of specific strategies and methods. From this small group of students that will be part of the investigation, the author will choose some students with the same conditions to be observed and to apply the different techniques. It will allow the author to analyzed results better and even correct mistakes.

3.4 INSTRUMENTS

3.4.1 Questionnaires

According to Hernández, R. (p.217, 2014) a questionnaire is the most common instrument used to collect data. It consists in a group of questions about one or more variables that will be measured. It should be coherent with the formulation of the problem and hypothesis. Questionnaires are used in different kinds of surveys.

These kinds of instruments may include two different styles of questions:

closed and opened questions. Closed questions include categories or answer options that have been previously delimited. It means that possibilities are presented to participants who must narrow down to them. These questions may be dichotomic (have two possible answers) or include some answer options. When asking closed questions, answers categories are delimited a priori by the investigator and they are shown to the participant who has to choose the option that better describes the appropriate answer.

On the other hand, questionnaires may include opened questions that do not delimit the different answer options. That is why the number of answer categories is elevated and can vary from a population to another.

Hernández, R. (2014, p.221) mentions that opened and closed questions should be clear, direct and easy to comprehend to the survey respondents. The pollster should avoid confused phrases, ambiguous questions, or with a double sense. It is recommended to use short questions because long questions may be tedious, take more time and can distract the participant. He mentions that questions should be formulated with simple, direct and familiar vocabulary.

3.4.2 Observations

Observations are other useful instrument that the author of this research will apply and that may be very effective. Hernández, R. (2014, p.252) mentions that observations consist in the systematic, valid and trustworthy register of behaviors and observable situations through a group of categories and subcategories.

According to Stuckey, H. (2018) an interview can be defined as “a way for researchers to understand the thought process that exists inside, an inner look at why people behave in the way they do. (p.56)”

Stuckey, H. (2018) also mentions that:

Interview styles range widely, but share a defining characteristic of using questions to understand the thoughts, feelings, beliefs and behavior of people. Primarily, there are four types of interviews common in social health: Structured; semi-structured; and narrative interview. The primary difference between them is the amount of control the interviewer has over the encounter and the aim of the interview. It is generally, best to tape-record interviews and later transcribe these tapes for analysis. While it is possible to take notes during the session (and encouraged), it is difficult to capture direct quotes from the participants while still engaging in the conversation. Because it is more important to maintain focus on the participant to build rapport and dialog rather than on the notes, the recorder will assist in capturing the data.

3.5 VARIABLES OPERATIONALIZATION

Table #1

Operationalization of Variables Chart				
General Objective: To apply strategies for students with autism spectrum disorder for learning general vocabulary in English by promoting equality and inclusion in class.				
Specific Objective	Variable	Conceptual Definition	Instrumental Definition	Operational Definition
To investigate different ways in which students with autism spectrum disorder can learn a new language.	Different ways in which students with autism spectrum disorder can learn a new language.	The ways in which students with autism spectrum disorder can learn a new language.	A questionnaire is used to evaluate the ways in which students with autism spectrum disorder can learn a new language.	The variable is considered valid if the ways to teach a new language to students with autism spectrum disorder are effective.
To find strategies that help students with autism spectrum disorder learning general vocabulary in English.	Strategies that help students with autism spectrum disorder learning general vocabulary in English.	Strategies for students with autism spectrum disorder to learn general vocabulary in English.	An observation is used to analyze the strategies that help students with autism spectrum disorder learn general vocabulary in English.	The variable is considered valid if students respond positively to the strategies that help them learn general vocabulary in English.
To use different methods for teaching English to students with autism spectrum disorder including them in a regular classroom.	Different methods for teaching English to students with autism spectrum disorder including them in a regular classroom.	Methods for teaching English to students with autism spectrum disorder in regular classrooms.	A questionnaire is used to evaluate the different methods that teachers can apply to teach English to students with autism spectrum disorder in regular classrooms.	The variable is considered valid if the different methods for teaching English to students with autism spectrum disorder in regular classrooms are effective.

CHAPTER IV
RESULTS AND ANALYSIS OF DATA

4.1 DIAGNOSTIC OF THE CURRENT SITUATION

4.1.1 Diagnostic of the situation

Through the analysis of data, the researcher finds the results of the strategies applied to students with autism spectrum disorders from six to eight years in Instituto Educativo San Gerardo during the second semester of 2021. The researcher compares and studies the diverse reactions of these group of students when being part of a regular class in a regular school.

The information is collected by applying different instruments such as three observations used for the researcher to study the way in which the students with autism spectrum disorders behave during the class, their attitude towards the different activities the teacher develops, and how the teacher works with them in the regular class. Moreover, two interviews in which two teachers comment how they manage students with autism spectrum disorders in the regular class, the activities that are effective for these students and the ones that do not work, and personal strategies or methods they apply. Besides, two interviews for parents of students with ASD in which they give their point of view from an important perspective as it is the family environment. Finally, an observation for the researcher to apply the strategies studied and analyze the results.

4.1.2 Description of data

During this observation the indicator observed was the strategies that help students with autism spectrum disorder learning general vocabulary in English. For the first instrument the researcher observed three different classes with the purpose of analyzing the way in which students with autism spectrum disorders

behave when they are in the class. The diagram D1 below shows the information collected during the first observation. Related to the first question, the researcher finds that two of the observed students were anxious from the beginning of the class because they did not know what to expect from the class and this is a common attitude in students with ASD, they usually show anxiety when they do not have enough information about an activity they have to develop. The other observed student was late for the school that day and it provoked frustration from the beginning of the class. He was not comfortable and he did not know how to express what he felt. It made difficult his performance during the class.

For the second question about the concentration of these students, the researcher finds that it depends on the strategies the teacher applies and if they are attractive for them. During this observation, the teacher started the class by showing some pictures and asking questions about them. It catches their attention and they were focused when the teacher was introducing the topic.

Talking about the third question, the students keep focused and interested if the teacher's methods and activities are interesting or striking for them. During this observation the teacher asked the students to copy some information from the board and their reactions were not positive. One of the students did not want to copy and had troubles to keep focused, the other student did it but in a disorganized way, and the last one also did it, but at a slow pace.

Related to the fourth question, the researcher finds that visual aids are really important and helpful when working with students with autism spectrum disorders. Visual Aids result attractive and interesting for these students and help them understand better what the teacher is talking about.

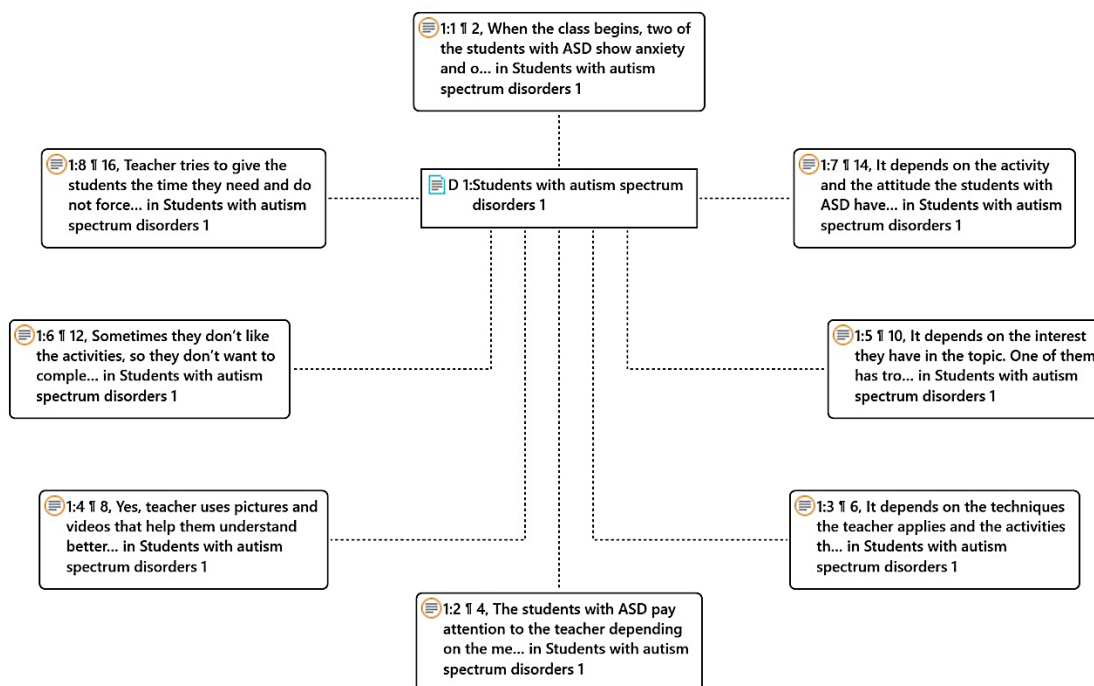
Regarding the fifth question of this observation, participating is not always easy for students with ASD. Sometimes they can have troubles when expressing their ideas orally. Two of the observed students do not have several problems to communicate, by contrast, they talk a lot and enjoy participating during the class. There is also a student who has not developed communicating skills, so he does not participate.

Talking about the sixth question, as mentioned before there are activities that result more difficult for students with autism spectrum disorders. For example, when they are asked to copy from the board, this is not easy for them due to their motor skills problems. The researcher sees that when the teacher asks the students to copy from the board, it provokes frustration and anxiety.

Related to the seventh question, the observed students could finish the different activities asked by the teacher, but they were difficult for them and they needed the teacher's help and support during the class.

Regarding the last question about the way the teacher manages the students' frustration, when a student is stressed because of a situation in the class, the teacher gives the student the time needed to feel better and she does not force the student to do an activity or task. It is known that students with ASD get frustrated easily when they feel under stress, so during this observation the teacher's strategy was to give them time.

Graph #1 Diagnostic Classroom Observation #1



Source: Elaborated by the author of this thesis using information from the Diagnostic Classroom Observation #1.

During this second observation the indicator observed was the strategies that help students with autism spectrum disorder learning general vocabulary in English. In the second diagram D2, related to the first question, the researcher finds that one of the students was motivated at the beginning of the class, he had a good attitude and was excited for the class. The other observed students did not show interest in the class, they were bored. The researcher analyzes that this attitude can be provoked by the hour of the class in which the observation was made, because it was not in the morning when these students can feel more relax and focused. On the other hand, it was during the afternoon and after some other classes which probably made them feel tired.

Regarding the second question, considering the aspect mentioned before about the time, it may influence the students' concentration. During this observation they had difficulty to be focused, barely pay attention to the teacher and get easily distracted with the rest of their classmates.

Talking about the third question, as mentioned before, the observed students were not completely focused during this observation. Moreover, the topic was attractive for them and there were moments when two of the students were asking questions about it.

Related to the fourth question, the researcher finds that as in the first observation, visual aids are very important and useful when working with students with autism spectrum disorders as this helps them realize what they are learning and what the teacher explains.

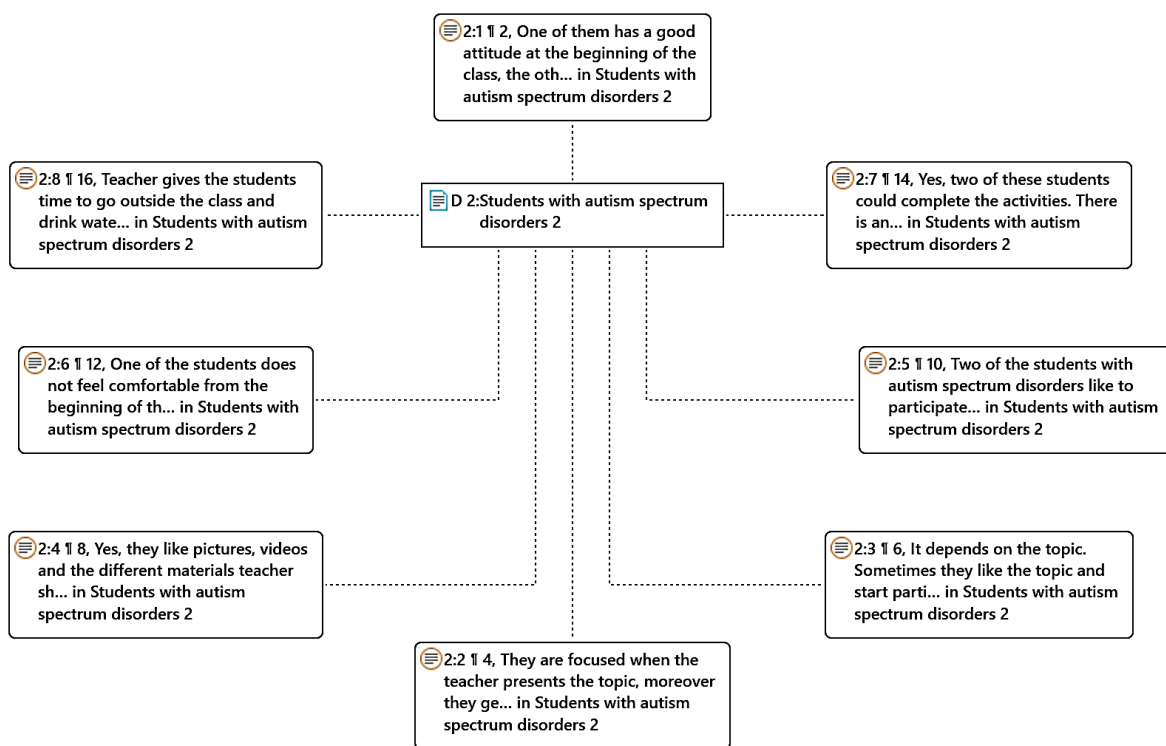
Regarding the fifth question of this observation, two of the observed students like to participate a lot during the class as they do not have communicating problems but as mentioned in the first observation, there is a student who has troubles communicating orally, so he does not participate.

Talking about the sixth question, one of the observed students was not comfortable during the class, he was anxious and it provoked that his performance was not as expected. The other students were calm during the class and had a good attitude.

Regarding the seventh question, two of the observed students could complete the activities the teacher asked them to do in the class, but the other student has troubles to keep focused and he also has a slow pace of work what influences when he is working on a task.

Related to the last question, the researcher finds that as in the first observation, what teachers usually do when a student with autism spectrum disorder is frustrated is to give them time to relax. Teacher gives them the opportunity to go outside or walk around.

Graph #2 Diagnostic Classroom Observation #2



Source: Elaborated by the author of this thesis using information from the Diagnostic Classroom Observation #2.

During this observation the indicator observed was the strategies that help students with autism spectrum disorder learning general vocabulary in English. In the diagram below, there are shown the results of the last diagnostic observation

made by the researcher. Related to the first question, during this observation two of the students were excited and feel comfortable from the beginning of the class, but the other student was unwilling because of personal situations that bothered him at home, which provokes a bad attitude.

Talking about the second question, the observed students were focused most of the time, there were distractions and disturbances provoked by the rest of their classmates, but there was not a situation that provoked negative attitude in these students.

Regarding the third question, one of the observed students liked the topic the teacher was introducing and he was focused during the class. The researcher realizes that it is not the case of the other two students. They do not like the topic and get bored after sometime. When the teacher lost their attention, it was difficult for her to catch these students' interest again.

Related to the fourth question, as mentioned before in the first and second observations, the visual aids are relevant resources that really help them when they are learning. It contributes to get their attention as it is not always easy to keep them focused just by speaking or making an oral presentation of a topic. They need this component to understand what they listen.

The researcher finds that all the observations have the same results in the fifth question because one of the observed students has not the ability to communicate fluently, but the other students enjoy participating in the class.

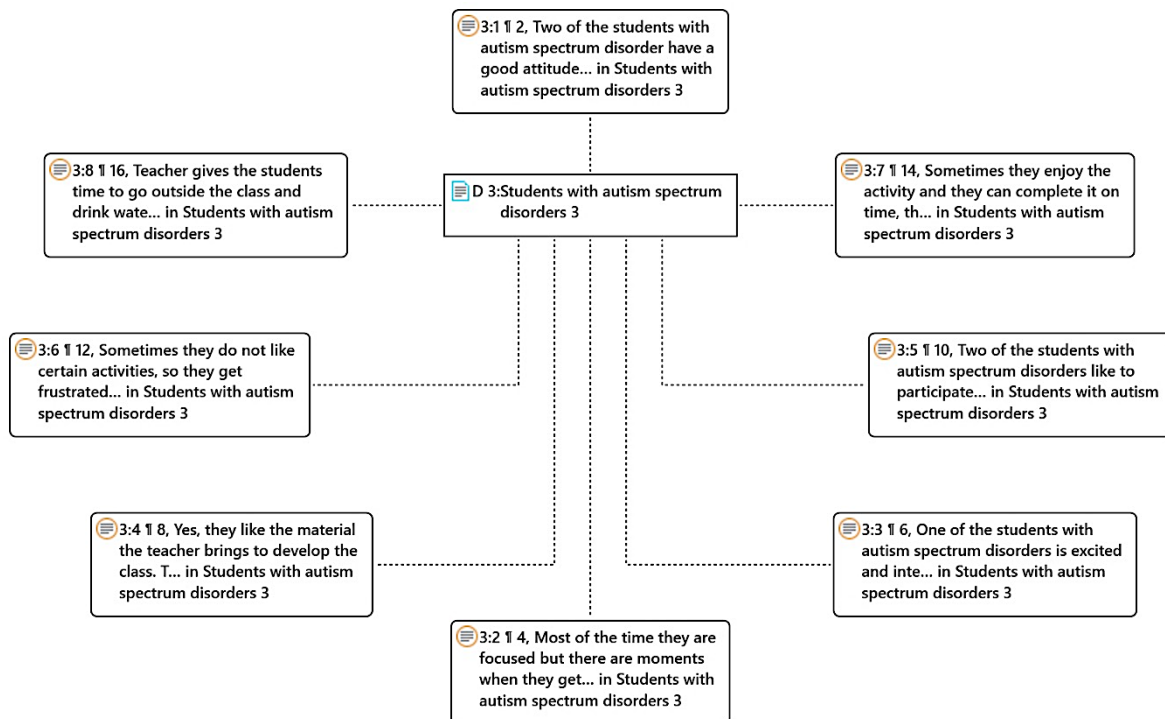
Related to the sixth question, the observed students were asked to complete three different activities during the class and they did not like two of them because they were asked to copy from the board and then complete some

sentences. For these activities the students got frustrated and anxious and just one of them could complete them.

Talking about the seventh question, as mentioned before, the students with autism spectrum disorders just liked one of the activities in which they had to color some pictures. They could complete this task but not the other activities.

For the last question, the researcher finds that teachers take the same actions when these students with ASD feel frustrated in the class. During these observations one of these students was the one who has more troubles to express himself and channel his emotions, so he got frustrated easily. Teachers agree and apply the same strategy of giving the student time to relax and take time to do an activity that helps him feel better.

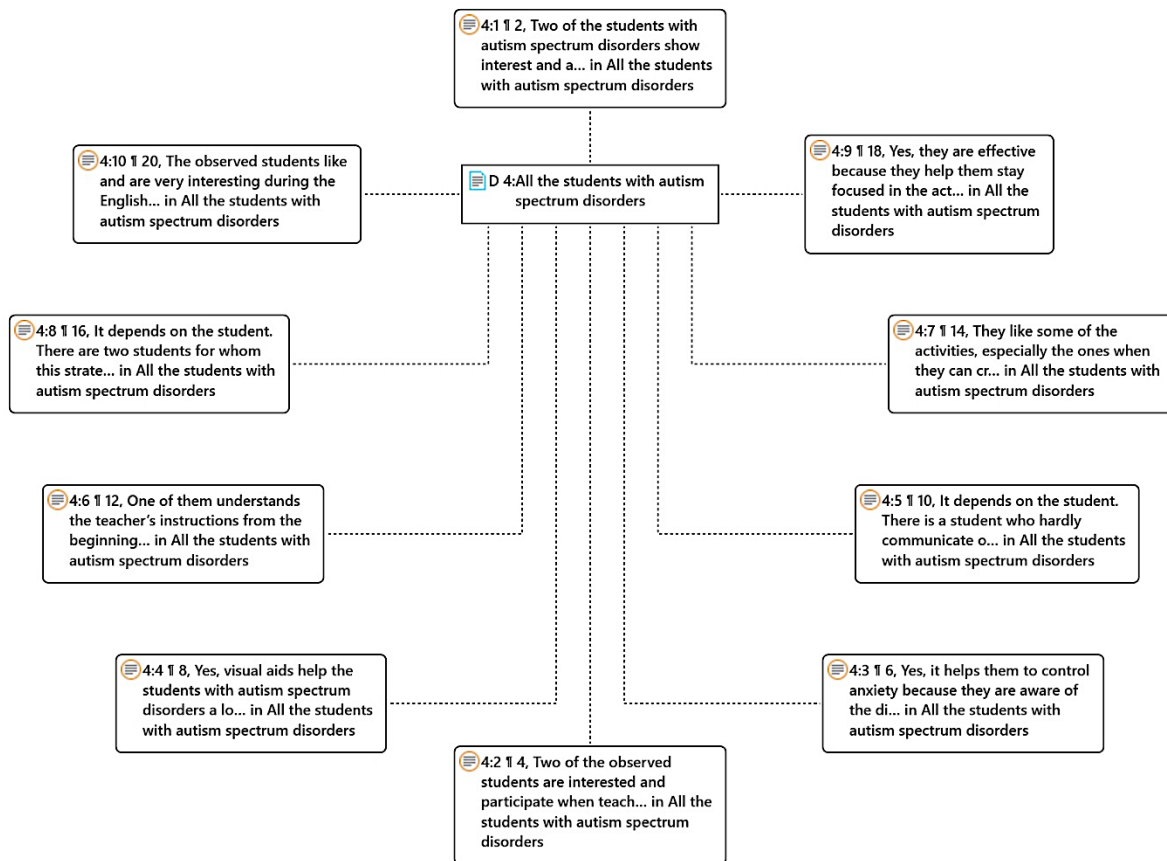
Graph #3 Diagnostic Classroom Observation #3



Source: Elaborated by the author of this thesis using information from the Diagnostic Classroom Observation #3

Through these three observations made by the researcher during different hours, she realizes that students with autism spectrum disorders are strongly influenced by what they experienced through their school day or at home before they go to school. The investigator finds that the stimulation of these students is crucial for their performance. During the observations there were students' reactions that were always the same despite the activities were similar and they were related to the students' attitude at certain times and the strategies teacher applied to catch their attention and interest. Other reactions relied in the condition and level of the spectrum each student have and their different skills.

Graph #4 Application Observation



Source: Elaborated by the author of this thesis using information from the Application Observation.

During this observation the indicator observed was the different methods for teaching English to students with autism spectrum disorder including them in a regular classroom. The previous diagram D4, refers to the observation the researcher made when applying the investigated strategies and methods in the class in order to analyze the students with autism spectrum disorder reactions.

The observation, made up of ten questions, in its first question refers to the attitude the students with ASD show when the teacher familiarizes them with the vocabulary they will be learning before the class begins. For this activity, two of the

observed students showed curiosity and it developed their interest because they wanted to know more about the topic. They started asking questions to the teacher and it motivated them to start the class. The other student just listened to the teacher and was a little bit distracted. The researcher finds that this strategy may be helpful when working with students with ASD.

The second question is related to their interest during the introduction of the topic. For this strategy, the researcher observes that two of the students are interested and paying attention. They even start asking questions about the topic what shows that interest, but the other student keeps distracted and he is drawing when the teacher is presenting the topic.

The next question refers to the chronogram the teacher applies to control anxiety in these students. It was effective for them and helped them feel calm during the class because they already knew what they were going to do. It also motivated them to try to complete all the activities as it represented a challenge.

For the fourth question, the strategy consists in the use of visual aids during the class. It was also effective because it is something these students need to understand and process the information they are receiving. The researcher realizes that visual aids as pictures and videos catch the students' attention and motivate them to start participating. They share their ideas and even stories they remember about the topic based on what they see.

The next question refers to the participation of the students with autism spectrum disorders in class. As mentioned before, there is a student who has not developed skills to communicate orally. He communicates with gestures and other ways but not by speaking. The other students like and enjoy participating and

participate a lot. One of these students has some language impairments (stuttering) but it does not stop him to participate and express what he thinks.

The sixth question refers to the comprehension of the instructions the teacher gives. As these students have different skills, level of disorder, and pace of work, they all needed the teacher in a different way. One of the students got the information about what he had to do and started working by himself. Teacher supervised his work, but he was working correctly. Other student was not focused, so he needed the teacher's help. Teacher repeated the instructions individually and supervised his performance. The other student has a slow pace of work and sometimes starts working without understanding what he has to do, so the teacher also supervised and strengthen the instructions by using simple words.

The next question is related to the activity the teacher asked them to do in order to evaluate the comprehension of the vocabulary they were learning. The teacher asked them to copy the words from the board in their notebooks. They did not like this activity, but it did not take so much time and they could finish. For the next activity, they were asked to make a book with the materials provided by the teacher. The students enjoyed this activity because they could color the pictures, decorate the book, the glue the pictures and fold the papers. These activities keep them focused and they really like to do this kind of tasks, they have a developed creativity.

The next question refers to the use of a timer to help the students organize their time when working in the class. During this observation the researcher realizes that this strategy is not effective for all the students with ASD because it can provoke anxiety. Two of the observed students could work with the timer and it was a good

guide for them. They were focused and complete their activities. The other student got stressed and frustrated because he worked slowly and time was out and he could not complete the activity.

The next question relates to the visual instructions in which the researcher uses flashcards to help the students remember what they are asked to do. This strategy was effective with the observed students because help them increase their concentration. They got distracted for a moment but then when they looked at the flashcards and they could remember what they were working on and they continued.

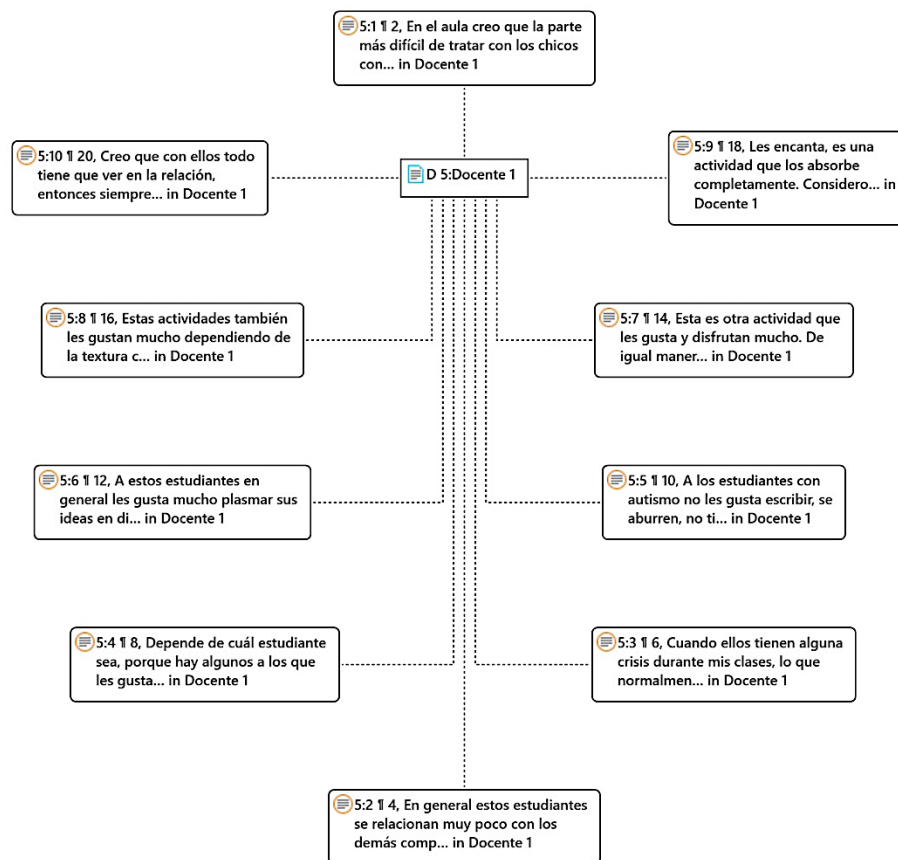
The last question refers to the attitude students with autism spectrum disorders have towards English. The researcher finds that the observed students like and enjoyed learning this language. They already know some words from videos, games and home learning, so it develops their interest at the school. They also feel motivated when they learn something different and especially when they understand.

For these interviews the indicator observed was the different ways in which students with autism spectrum disorder can learn a new language. The next diagrams D:5 and D:6 refers to the interviews the investigator made to two teachers that work with the students with autism spectrum disorders, in which they explain how these students react during their classes and talk about their experiences. Through the analysis of these interviews, the investigator compares the different answers and realizes the methods and strategies that have been effective for these teachers when working with students with autism spectrum disorders in regular classrooms. The interviews are made up of ten questions

related to the way these students behave and the activities that work and do not work for them.

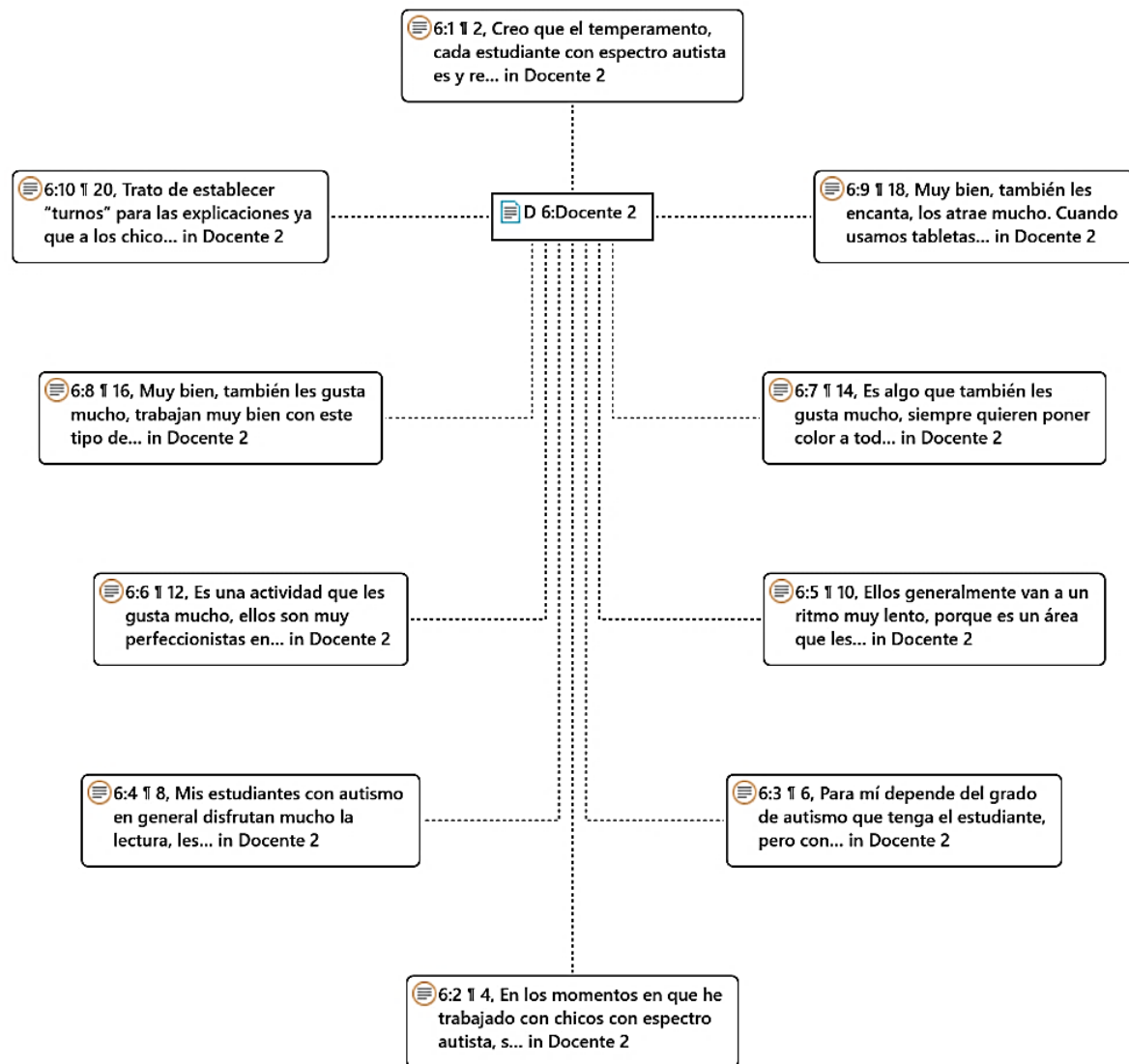
The diagrams below show the answers the teachers gave to the investigator during the interview.

Graph #5 Entrevista a docente #1



Source: Elaborated by the author of this thesis using information from the Entrevista a Docente #1.

Graph #6 Entrevista a Docente #2



Source: Elaborated by the author of this thesis using information from the Entrevista a Docente #2.

The first question refers to the behaviors of the students with autism spectrum disorders the teachers consider the most difficult of managing in class. One of the interviewed teachers mentions that the aspect she considers is the most difficult to manage is the sensitive area because these students are taking

classes in a noisy environment surrounded by many other children and different situations happening, and they get frustrated and stressed. The other teacher believes that their temper is the most difficult aspect because they all can react in a different way. Some of these students can be aggressive while other can be passive.

The next question asks about the relationship between the students with autism spectrum disorder and their classmates. One of the interviewed teachers considers that these students have difficulty when socializing and having contact with others and she mentions that they have a good relationship just with the classmates they choose. Unlike, the other teacher mentions that students with autism spectrum disorders have an excellent relationship with their classmates and she says that they are helped and included by the other students.

The third question relates to the methods or techniques the teachers apply when a student with ASD has a crisis, a situation that is common with this population. One of the interviewed teachers comments that she usually gives the student time to go outside the classroom and take some time to feel better, breathe, play, and relax. On the contrary, the other teacher believes that it is really important for the teacher to establish limits in the class and make the students understand those limits. She mentions that these situations depend on the level of the disorder the student has, but she emphasizes on the position on authority the teacher should have to help the students overcome that crisis with a firm position.

The next question asks about the students' response to the reading activities. Both teachers have different opinions about this kind of activities. One of

them mentions that students with autism spectrum disorders do not like to read and have difficulty when trying to do it. The other teacher says that the students like to read and they can do it very well. She mentions that they have good reading skills and when they like it, they enjoy participating.

The fifth question asks about the activities in which the students have to copy or write. Both teachers agree, they mention that students with autism spectrum disorders have difficulty in this area due to the problems they have with their motor skills. Teachers comment that these students do not like to copy or write and sometimes they cannot do it and it provokes frustration.

The next question is related to the activities in which these students have to draw. For this question both teachers also agree. They mention that students with ASD have excellent skills for drawing and they do it very well. Teachers say that these students are perfectionist, they try to put each part of their picture in the right place, so drawing a picture takes much time for them.

The next question asks about these students' reaction when they have to color. Both teachers mention that this is an activity they enjoy. As they are perfectionist, they try to not color outside the lines. They also like to combine colors and take their time when they color.

The eighth question is related to the activities in which they have to use paintings, playdoh, and other materials they handle with their hands. The interviewed teachers mention that these students enjoy working with this kind of materials and they create beautiful things, but one of the teachers says that they do not work in order and cleanliness and neither like to clean their places. Unlike,

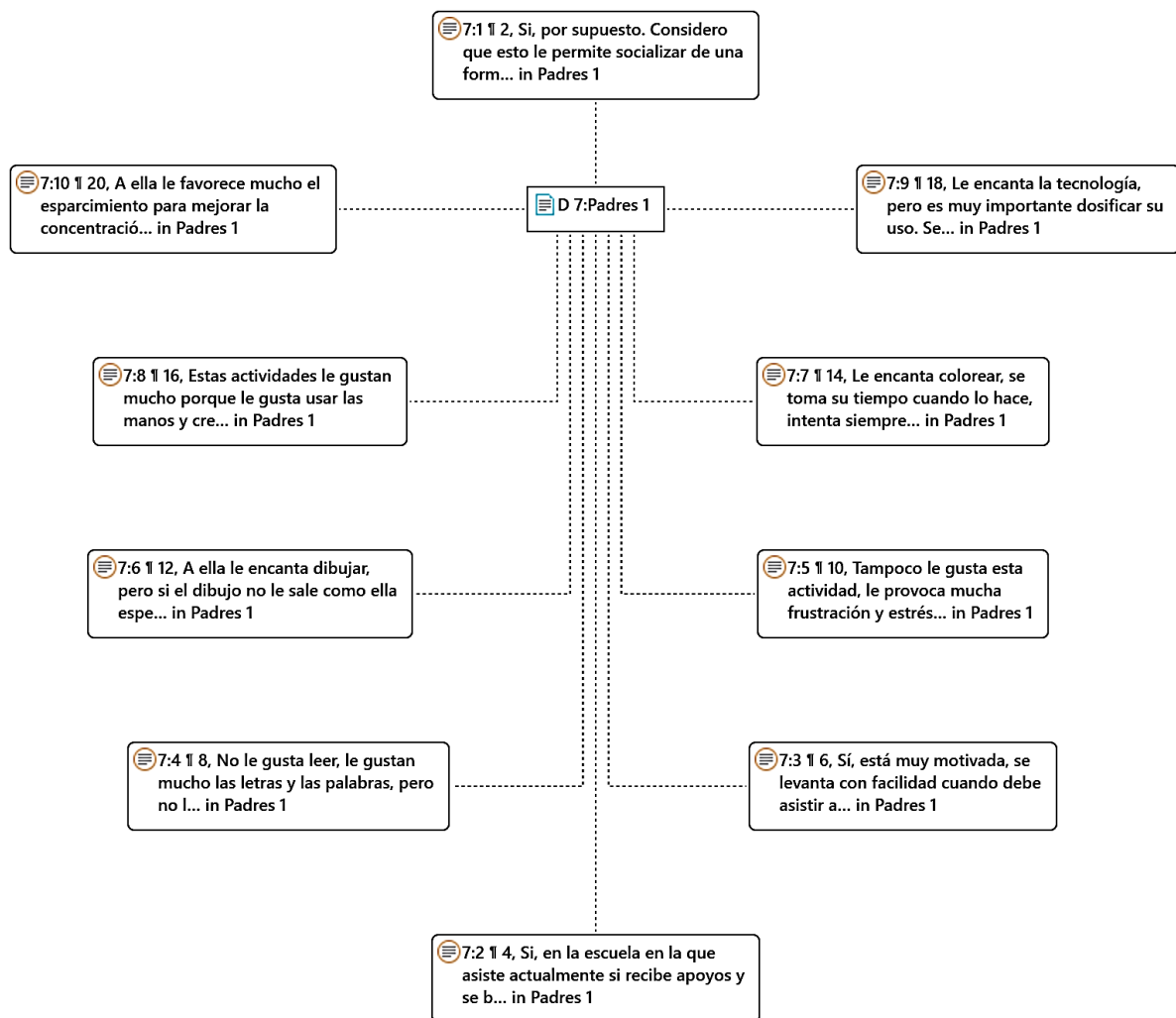
the other teacher mentions that these students are very organized and do not like to work in messy places, so they clean and organize their things and materials.

The next question is related to the use of technology with students with autism spectrum disorders. Both teachers mention that this resource is very helpful and effective for them due to this visual and interactive content, but they consider that it is very important to establish limits for this tool to not become harmful.

The last question of the interview makes reference to the personal strategies the interviewed teachers apply and that result effective for them when working with the students with ASD. The first teacher comments that she believes that it is very important to have a good relationship with these students. She thinks that teachers should gain the trust of these students in order to make them feel confident in class. She likes them to play games and make interactive activities during the class in which students participate and receive awards or surprises. It motivates them and benefits their learning process. The other teacher mentions that a strategy that works in her classes is trying to establish turns to give the instructions, so she explains to the whole class, asks if they have questions and then she works with the students with ASD individually. All the students have a routine and they respect their turns and learn to wait.

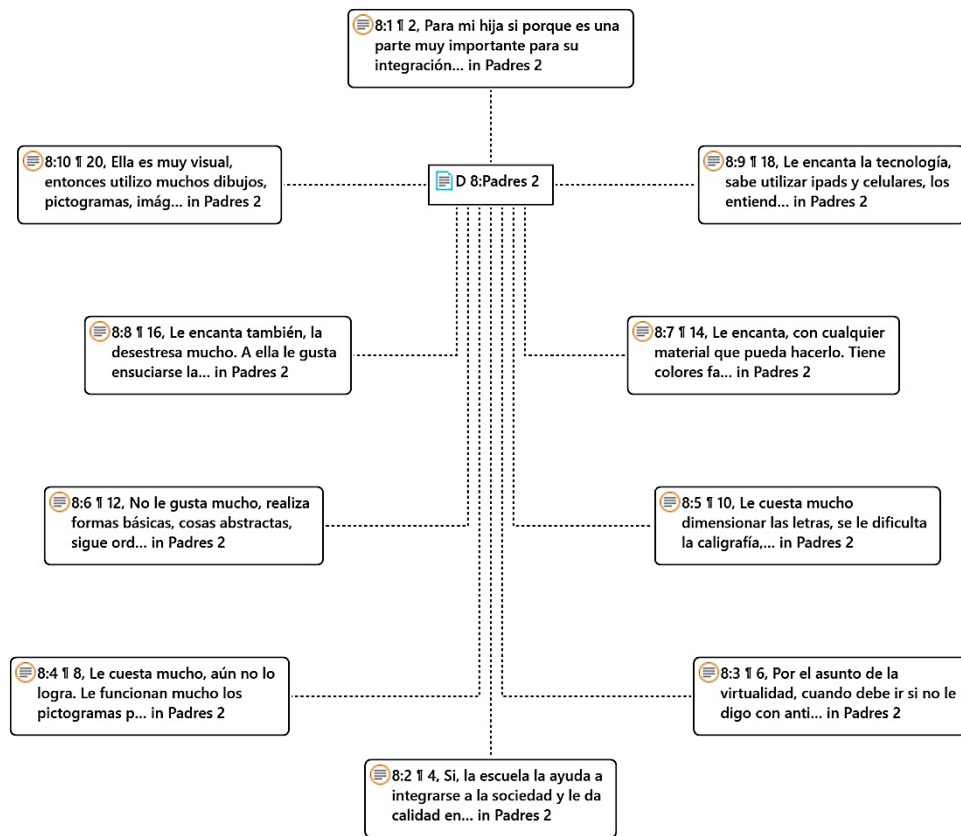
For these interviews the indicator observed was the different ways in which students with autism spectrum disorder can learn a new language. The next diagrams D7 and D8 are related to two interviews the investigator made to parents of students with autism spectrum disorders based on their experiences with their kids at home and every day.

Graph #7 Entrevista a padres de familia #1



Source: Elaborated by the author of this thesis using information from the Entrevista a padres de familia #1.

Graph #8 Entrevista a padres de familia #2



Source: Elaborated by the author of this thesis using information from the Entrevista a padres de familia #2.

The first question asks about their opinion of involving kids with autism spectrum disorders in regular schools. The first interviewee mentions that it is very beneficial for kids with these disorders because it allows them socialize in a different way and create new relationships with people around them not only in the house environment. The other interviewee agrees and comments that it is beneficial for her daughter and her integration, but she mentions that it might not work for all the children with this condition because of their different levels and

limitations. She mentions that some students with these disorders may need special education and schools.

The second question relates to the methods and techniques their kids receive when been taught. The first interviewee believes that there are schools where discrimination still happens and teachers are not prepared to teach kids with disabilities. However, she comments that her daughter does receive good and professional attention in the school where she is enrolled currently. The other interviewee mentions that the school and teachers offer her daughter a good education that helps her integrate to society and develop skills. Moreover, they suggest different therapies and extra support.

The next question asks about the motivation the kids have when going to school. The first interviewee mentions that her daughter feels motivated when she has to go to school, wakes up early and shows a good attitude. The other interviewee comments that virtually has modified her daughter's routine, so when she has to go to presential classes, it represents a difficult process in which her daughter needs to know in advance, in order to prepare her for this change.

Related to the fourth question about the kids' reaction towards reading activities they both agree in the attitude their kids have. They say their kids have difficulty to read and get frustrated easily.

Talking about the fifth question related to activities in which kids have to copy or write, both interviewees agree in their kids' reaction. They do not like this kind of activities, they have motor skills troubles what make them work in a disorganized way, they are not aware of dimension or size, and most of the times they cannot do it.

The sixth question asks about those activities in which kids with autism spectrum disorders are asked to draw. Both interviewees mention that this is not their kids' favorite activity. They do it but get easily frustrated if the results are not as they expected. They mostly draw some abstract shapes.

The next question is related to the activities in which these children have to color. Both interviewees agree. They mention their kids like and enjoy this activity, they are perfectionist and like colors a lot.

The eighth question asks about activities in which they use paintings, playdoh and other materials. Both interviewees mention that kids like to use these materials, they de-stress and like the different textures. The first interviewee comments that her daughter likes these activities but she does not like messy places, so she gets frustrated for this reason. The second interviewee mentions that their daughter is very creative and the use of these materials develop her skills.

The next question is related to the use of technology. Both interviewees mention that their kids have good and develop skills to use technology. They like using applications of music, educative games, puzzles, music, animals, numbers, among others. Moreover, they comment that limits are very important for this tool to not become damaging.

The last question asks parents for personal strategies or techniques they apply at home to help their kids. The first interviewee mentions that for her daughter recreation results very effective to benefit their concentration and performance. Some activities they do are exercising, running, walking and playing with water, in order to relax her and improve her behaviors. The second

interviewee comments that her daughter has a good visual memory and skills, so she tries to use pictures, pictograms, and all the visual helpers for her to stay focused. She mentions that her daughter is a structured girl, so making lists to organize things and specifying instructions every time she has to do a task are very effective strategies she applies at home.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS AND RECOMMENDATIONS

5.1.1 Conclusions

At the end of this investigation, related to the first specific objective, the investigator concludes that there are many different ways in which students with autism spectrum disorders can learn a new language, but the investigator suggests to observe the students before teaching them to realize their special needs, and the methods that work better for them.

Talking about the second objective, the investigator finds diverse techniques to help these students learn vocabulary in English. The investigator concludes that students with autism spectrum disorders have diverse learning styles, they are very creative and capable to learn a new language. Teachers just need to apply these techniques correctly, be patient, and stimulate them.

Regarding the last objective, the investigator concludes that it is possible for the students with autism spectrum disorders learn English when been part of a regular classroom if teachers apply the right methods. The investigator finds some of these appropriate methods that work for them in this environment and help them stay focused.

5.1.2 Recommendations

It is recommended for teachers to always observe their students with autism spectrum disorders before teaching them in order to find the best strategies and methods that work for them.

Besides, it is recommended to analyze each student's situation to apply the

techniques that are really effective for them, always taking into account that each student has his or her own learning style, and when working with students with autism spectrum disorders teachers should be more aware before choosing a method.

It is also recommended to follow an order when applying the strategies, as these students are very structured. It is always needed for them to have an introduction and at the end an evaluation. Teachers also need this structure to analyze the effectiveness of that specific strategy applied for each student, in order to modify it or keep it the same. Teachers should observe their students and adapt these strategies to their needs.

CHAPTER VI
PROPOSAL

6.1 PROPOSAL

6.1.1 Proposal name

Strategies to teach vocabulary about the letter J to students with autism spectrum disorders.

6.1.2 Development of the proposal

Table#2

Strategy	Application
1. Familiarization of vocabulary.	Teacher presents the visual aids that will be used during the class to students with autism spectrum disorder before the class begins, for them to feel familiarized with the vocabulary they will learn.
2. Introduction of the vocabulary.	Teacher shows the visual aids about the letter J to students and say the words aloud. Students repeat the words as many times as necessary.
3. Visual instructions.	Teacher gives students the instructions of each activity using flashcards with pictures, so the students can see the instructions constantly in order for them to stay focus on the task they are working on. Every time the student finishes an activity, teacher gives the next instruction and explains it. Instructions must be given one by one.
4. Use of a chronogram.	Teacher uses a chronogram with the activities that will be developed for students with autism spectrum disorder to control anxiety during the class.
5. Use of a timer.	Teacher uses a timer to controls the time each activity takes. It helps students with autism spectrum disorder stay focused even if they can complete the activity or not.

Making a book about the letter J. (Activity to develop)	Teacher gives students the dialogues and pictures of the book they will make using the words with the letter J they are learning. The students color, cut, and paste the parts of the book. This activity helps them improve their motor skills.
Repetition.	Teacher reads the book. Students participate and repeat the words. Repetition will help them memorize the vocabulary.

REFERENCES

- Aprilian Ria Adisti. (2020). Introducing English as a Foreign Language for Autism Children, Why Not?. *The Indonesian Conference on Disability Studies and Inclusive Education*, 1, 17-26. Retrieved from <http://conference.uin-suka.ac.id/index.php/icodie/article/view/6>
- Azeem, M. W., Imran, N. & Khawaja, I. (2016). Autism Spectrum Disorder: An Update. *Psychiatric Annals*. 46(1) 58-62. DOI: 10.3928/00485713-20151202-01
- Barrantes, R. (2014). *Investigación: Un camino al conocimiento: enfoque cuantitativo y cualitativo*. Ágora: Serie Estudios.
- Braunsteiner, M.L. & Mariano-Lapidus, S.(2014). A Perspective of Inclusion: Challenges for the Future. *Global Education Review* 1(1). 32-43
- Browne, E. & Millington, K. (2015). Social development and human development: Topic guide. Birmingham. Oxford: GSDRC, University of Birmingham. HEART. http://www.gsdrc.org/wp-content/uploads/2015/10/SD_HD.pdf
- Centre for Autism. (2020) Autism and School Refusal (Issue No. 32) <https://www.middletonautism.com/files/uploads/ca636534cba436f811576e4c8b128e39.pdf>
- Chaaya, R. (2012). *Inclusion of Students with Autism in General Education Classrooms* [Master of Teaching Department of Curriculum, Teaching and Learning, University of Toronto].

<https://tspace.library.utoronto.ca/bitstream/1807/35088/1/Rana%20Chaaya.MTRP.pdf>

Constitución Política de Costa Rica (Const). Ley 7600. 7 de noviembre de 1949.

Decristofaro, A. (2016). *Students with Autism in Inclusive Classrooms* [Master of Teaching Department of Curriculum, Teaching and Learning, University of Toronto].

https://tspace.library.utoronto.ca/bitstream/1807/72180/1/Decristofaro_Amanda_N_201606_MT_MTRP.pdf

Finch, K., Watson, R., MacGregor, C. (2013) Teacher Needs for Educating Children with Autism Spectrum Disorders in the General Education Classroom. *The journal of special education apprenticeship*, 2(2), 2-26.

Frank-Briggs, A. (2012). Autism in Children: Clinical Features, Management and Challenges. *The Nigerian Health Journal*. 12(2), 27-30.

Galazka, A. (2020). *Supporting English Language Teachers in Teaching Autistic Primary School Learners*. *The New Educational Review*. 58(4). 191-207. DOI: 10.15804/tner.2019.58.4.15

Hernández Sampieri R, Fernández Collado C. y Batista Lucio P. (2014). *Metodología de la Investigación*. 6 Ed. México: McGraw Hill.

Hilyati, A. (2013). *Teaching English as Foreign Language to students with autism*. [Master Program in English Education, State Islamic University].

<https://repository.uinjkt.ac.id/dspace/bitstream/123456789/24768/3/ARIFAH%20HILYATI-FITK.pdf>

Kazou, K. (2017). Analysing the definition of disability in the un convention on the rights of persons with disabilities: Is it really based on a 'social model' approach? *International Journal of Mental Health and Capacity Law*.

<file:///C:/Users/are03/Downloads/630-Article%20Text-1966-1-10-20170921.pdf>

Lifia, A. S., & Kurniawati, L.A. (2020). Differential instruction in teaching English for students with autism spectrum disorder. *Journal of English Teaching Adi Buana*,05(01), 41-51.

Lindgren, S., Doobay, A. (2011). Evidence-Based Interventions for Autism Spectrum Disorders. [*University of Iowa*].

<https://www.interventionsunlimited.com/editoruploads/files/iowa%20DHS%20Autism%20Interventions%206-10-11.pdf>

Lollar, D., Myers, S., Johnson, C., Lipkin, P., JD, C., LW, D., Duby, J., ER, E., Levey, E., GS, L., Murphy, N. & AH, T. (2007). Management of Children With Autism Spectrum Disorders. *Pediatrics*. 120(5) 1162-1182. DOI: 10.1542/peds.2007-2362

Lopes, A. G., and Miranda, F., (2014). *Teacher's point of view about working with children of the autism spectrum*. *Audiol Commun Res*. 19(2) 171-8.

- Mohammad, E., Fatimah, A. & Yazan, A. (2019). Autism Spectrum Disorder (ASD); Symptoms, Causes, Diagnosis, Intervention, and Counseling Needs of the Families in Jordan. *Canadian Center of Science and Education*. 13(5) 48-56. doi:10.5539/mas.v13n5p48
- Nassaji, H. (2015). Qualitative and descriptive research: Data type versus data analysis. *Language Teaching Research*. 19(2) 129-132. DOI: 10.1177/1362168815572747
- Padmadewi, N. N., & Artini, L. P. (2017). Teaching English to a student with autism spectrum disorder in regular classroom in Indonesia. *International Journal of Instruction*, 10(3), 159–176. <https://doi.org/10.12973/iji.2017.10311a>
- Pennington, M., Cullinan, D. & Southern, L. (2014). Defining Autism: Variability in State Education Agency Definitions of and Evaluations for Autism Spectrum Disorders. *Autism Research and Treatment*. 2014(ID 327271) 1-8. <https://doi.org/10.1155/2014/327271>
- Reagan, N. (2012). *Effective Inclusion of Students with Autism Spectrum Disorders* [MS in Special Education, St. John Fisher College]. <https://core.ac.uk/download/pdf/48616837.pdf>
- Rezvani, M. (2018). Teaching English to Students with Autism: Montessori-Oriented versus Audio-Lingual Method. *International Journal of Science, Engineering and Management (IJSEM)*. 03(02) 19-23.

- Rusell, G. (2012) The Rise and Rise of the Autism Diagnosis. *Autism an open access journal*, 2(1). DOI: 10.4172/2165-7890.1000e104
- Salam, A. (2016). Teaching English as a Foreign Language to Students with Learning Disabilities at the Intermediate and Advanced Levels: A Multiple-Strategies Approach. [Professor of Teaching English as a Foreign Language, Suez University of Egypt]. <https://files.eric.ed.gov/fulltext/ED568128.pdf>
- Stuckey, H. (2013). Three types of interviews: Qualitative research methods in social health. *Methodological Issues in Social Health and Diabetes Research*. 1(2) 56-59. DOI: 10.4103/2321-0656.115294
- Szymkowiak, C.M. (2013). Using effective strategies for the elementary English language learner with autism spectrum disorder: A curriculum project. [Master of Science in Education, State University of New York at Fredonia]. https://dspace.sunyconnect.suny.edu/bitstream/handle/1951/63038/Claire_Szymkowiak_Masters_Project_May2013.pdf?sequence=1&isAllowed=y
- Uithayakumar, N., & Rabi, N. M. (2020). *Teachers' Readiness to Accommodate Autistic Children in the Classrooms at International Schools*. *International Journal of Academic Research in Business and Social Sciences*, 10(7), 831–837. DOI:10.6007/IJARBSS/v10-i7/7613
- Villegas, D. (2017). *Estrategias de abordaje del paciente con Autismo, procedimientos diagnósticos y el manejo en el Primer Nivel de Atención*. Repositorio Institucional de la Universidad de Costa Rica.

Volkmar, F., Reichow, B. & McPartland, J. (2012). Classification of autism and related conditions: Progress, challenges, and opportunities. *Dialogues in clinical neuroscience*. 14(03), 229-237.

ANNEXES

Annex #1

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Researcher: Arellys Molina Guzmán

Site: Alajuela

Date of observation applied: _____

**Diagnostic Classroom Observation #1**

Indicator Observed: Strategies that help students with autism spectrum disorder learning general vocabulary in English.

The purpose of this observation is to perceive how the students with autism spectrum disorders from the group observed behave and react to the different activities the teacher applies during the class. The information collected here will be strictly used in an investigation project and is totally confidential.

Aspect to observe	Observations
Teacher analyzes students' behavior and reactions towards the activities applied by the teacher during the class.	
1. Do the students with autism spectrum disorder have a good attitude and show motivation from the beginning of the class?	When the class begins, two of the students with ASD show anxiety and one of them did not want to go to school, so he looks stressed and uncomfortable.
2. Do they are focused when teacher introduces the topic?	The students with ASD pay attention to the teacher depending on the method teacher uses to introduce the topic. If it is attractive for them and arouse curiosity, they keep focused. Teacher started showing pictures and asking questions, so it caught their attention.
3. Do they show interest in the topic?	It depends on the techniques the teacher applies and the activities they are asked to do. Sometimes they get bored and distracted. Teacher asked them to copy some information from the board, so one of them did not want to do it. The other student did it, but their work was not

	organized, and the last student started copying but really slowly.
4. Do the visual aids used by the teacher seem attractive for the students with autism spectrum disorder?	Yes, teacher uses pictures and videos that help them understand better what they are learning and that make them associate things with their environments.
5. Do they participate in class?	It depends on the interest they have in the topic. One of them has troubles when expressing and communicating so he does not participate. The other students with ASD like to participate and tell their stories.
6. Do they show anxiety or frustration towards the activities they are asked to do?	Sometimes they don't like the activities, so they don't want to complete them. When the teacher asks them to do it, they show frustration. Some of the activities they don't like are writing and copying from the board.
7. Do they complete the different tasks?	It depends on the activity and the attitude the students with ASD have during the class. During this observation they completed the activities with the teacher's guide.
8. How does the teacher manage autistic students' frustration?	Teacher tries to give the students the time they need and do not force the student to do an activity.

Annex #2

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Researcher: Arellys Molina Guzmán

Site: Alajuela

Date of observation applied: _____

**Diagnostic Classroom Observation #2**

Indicator Observed: Strategies that help students with autism spectrum disorder learning general vocabulary in English.

The purpose of this observation is to perceive how the students with autism spectrum disorders from the group observed behave and react to the different activities the teacher applies during the class. The information collected here will be strictly used in an investigation project and is totally confidential.

Aspect to observe	Observations
Teacher analyzes students' behavior and reactions towards the activities applied by the teacher during the class.	
1. Do the students with autism spectrum disorder have a good attitude and show motivation from the beginning of the class?	One of them has a good attitude at the beginning of the class, the other students show lack of interest and boredom.
2. Do they are focused when teacher introduces the topic?	They are focused when the teacher presents the topic, moreover they get easily distracted when their classmates talk.
3. Do they show interest in the topic?	It depends on the topic. Sometimes they like the topic and start participating and asking questions, but sometimes they get bored and do not pay attention. In this case, even tough they were not completely focused, they asked some questions about the topic.
4. Do the visual aids used by the teacher seem attractive for the	Yes, they like pictures, videos and the different materials teacher shows to explain the topic.

students with autism spectrum disorder?	
5. Do they participate in class?	Two of the students with autism spectrum disorders like to participate a lot, but the other student has troubles communicating, so he does not participate.
6. Do they show anxiety or frustration towards the activities they are asked to do?	One of the students does not feel comfortable from the beginning of the class and it influences their performance during the class. The other students were calm during the class.
7. Do they complete the different tasks?	Yes, two of these students could complete the activities. There is an student with autism spectrum disorder who could not finish because of his pace of work and problems to be focused.
8. How does the teacher manage autistic students' frustration?	Teacher gives the students time to go outside the class and drink water, walk around or just breathe for a moment.

Annex #3

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Researcher: Arellys Molina Guzmán

Site: Alajuela

Date of observation applied: _____

**Diagnostic Classroom Observation #3**

Indicator Observed: Strategies that help students with autism spectrum disorder learning general vocabulary in English.

The purpose of this observation is to perceive how the students with autism spectrum disorders from the group observed behave and react to the different activities the teacher applies during the class. The information collected here will be strictly used in an investigation project and is totally confidential.

Aspect to observe	Observations
Teacher analyzes students' behavior and reactions towards the activities applied by the teacher during the class.	
1. Do the students with autism spectrum disorder have a good attitude and show motivation from the beginning of the class?	Two of the students with autism spectrum disorder have a good attitude and feel excited for the class. There is a student who is unwilling for some other reasons and do not show interest in the class.
2. Do they are focused when teacher introduces the topic?	Most of the time they are focused but there are moments when they get distracted for things that interrupt the class or because of their classmates.
3. Do they show interest in the topic?	One of the students with autism spectrum disorders is excited and interested in the class. The other students do not like the topic so they get bored after some time.
4. Do the visual aids used by the teacher seem attractive for the students with autism spectrum disorder?	Yes, they like the material the teacher brings to develop the class. They like pictures, videos and images when the teacher shows them. They catch their attention.

5. Do they participate in class?	Two of the students with autism spectrum disorders like to participate and share ideas. One of the students, has not good skills to communicate, so he does not participate.
6. Do they show anxiety or frustration towards the activities they are asked to do?	They do not like certain activities, so they get frustrated and anxious with some of these tasks they are asked to do.
7. Do they complete the different tasks?	They enjoy one of the activities and they can complete it on time, there are also other activities that are more difficult for them to complete and take more time than the expected.
8. How does the teacher manage autistic students' frustration?	Teacher gives the students time to go outside the class and drink water, walk around or do some breathing exercises.

Annex #4

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Researcher: Arellys Molina Guzmán

Site: Alajuela

Date of observation applied: _____

**Application Observation**

Indicator Observed: different methods for teaching English to students with autism spectrum disorder including them in a regular classroom.

The purpose of this observation is to analyze how the students with autism spectrum disorder from the group observed react to the special methods applied by the teacher in order to help them learn vocabulary in English. The information collected here will be strictly used in an investigation project and is totally confidential.

Aspect to observe	Observations
Teacher analyzes students' reactions when participating in different activities and strategies applied by the teacher during the class.	
1. Do the students with autism spectrum disorder show a good attitude when the teacher familiarizes them with the vocabulary that will be studied?	Two of the students with autism spectrum disorders show interest and ask some questions to the teacher about the topic, but there is a student who just listens to the teacher and gets distracted.
2. Do they show interest when the teacher introduces the vocabulary?	Two of the observed students are interested and participate when teacher introduces the vocabulary. The other student is not paying attention and keeps doing a different activity. (drawing)
3. Is the chronogram effective for the students with autism spectrum	Yes, it helps them to control anxiety because they are aware of the different activities they are going to develop. Besides, the chronogram helps them to be focused and motivates

disorder to reduce anxiety during the class?	them to achieve certain goals because it represents a challenge and they want to complete the activities.
4. Are the visual aids attractive for the students with autism spectrum disorder?	Yes, visual aids help the students with autism spectrum disorders a lot. When teacher shows pictures and videos, they catch their attention and motivate them to start participating and mentioning things related to what they are watching.
5. Do the autistic students participate in class?	It depends on the student. There is a student who hardly communicate orally, so he can just mention some words. Moreover, he makes gestures that help him communicate. The other students like and enjoy participating.
6. Do they understand the instructions given by the teacher?	One of them understands the teacher's instructions from the beginning and starts working by himself, but the other students with autism spectrum disorders need the teacher's guide and instructions individually.
7. Do they like the activity they are asked to do?	They like some of the activities, especially the ones when they can create something and they can be creative. They have difficulty when copying from the board and do not like it.
8. Is the timer effective when they are working?	It depends on the student. There are two students for whom this strategy is effective because it helps them stay focused and their performance increases. Nevertheless, there is a student who gets stressed and frustrated with the timer because his pace when working is slower and he cannot finish on time.
9. Are the visual instructions effective for the autistic students?	Yes, they are effective because they help them stay focused in the activity they are working on. Sometimes they get distracted and the visual instructions help them come back to their work.
10. What is the students' attitude towards English?	The observed students like and are very interesting during the English class. Some of them already know some words in English, so it develops their curiosity and interest.

Annex #5

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Interviewer: Arelllys Molina Guzmán

Site: Alajuela

Date of interview applied: _____

**Entrevista a docente #1**

Indicator Observed: Different ways in which students with autism spectrum disorder can learn a new language.

Esta entrevista se realiza con el propósito de conocer su opinión en relación al manejo y enseñanza a estudiantes con algún trastorno del espectro autista integrados en grupos regulares. Así mismo, se desea conocer las técnicas que usted como docente aplica para trabajar con estos estudiantes y para manejar la ansiedad y frustración que ellos usualmente presentan. La investigación es realizada en inglés, sin embargo, esta entrevista se realizará en español para su mayor comodidad. Toda la información que se obtenga será utilizada únicamente con propósito investigativo, por lo que es totalmente anónima y confidencial.

1. ¿Cuáles son los rasgos de sus estudiantes con trastornos del espectro autista que usted considera son más difíciles de manejar en clase?

En el aula creo que la parte más difícil de tratar con los chicos con espectro autista es el área sensorial, porque están en el aula con todos los demás niños, en un ambiente de mucho ruido, niños hablando y con diversas situaciones pasando en la clase y ellos se estresan, en ocasiones se frustran, se sienten agobiados y no quieren participar.

2. ¿Cómo es la relación de los estudiantes con autismo y el resto de sus compañeros en el aula?

En general estos estudiantes se relacionan muy poco con los demás compañeritos, suelen aislarse y pasar más tiempo solos. Son muy selectivos, llegan a relacionarse con muy pocos compañeritos y son aquellos con los que tienen cierta afinidad o admiración por alguna cosa en específico.

3. Cuando se presentan situaciones de estrés o frustración en estos estudiantes ¿Cómo las maneja usted?

Cuando ellos tienen alguna crisis durante mis clases, lo que normalmente hago es que los llevo fuera del aula, intento tranquilizarlos, hablo con ellos, les hago sentir que todo está bien y les pido que jueguen un ratito con agua o con algún objeto que a ellos les guste, les pido que caminen, que hagan ejercicios de respiración conmigo, que se quiten los zapatos un rato, entre otras cosas que pueden ayudarles a sentirse mejor.

4. ¿Cómo se comportan los estudiantes con autismo ante actividades de lectura?

Depende de cuál estudiante sea, porque hay algunos a los que les gusta mucho la lectura y son muy buenos, no tienen dificultad. Hay otros que odian la lectura y se convierte en una frustración tener que leer. Creo que depende mucho del proceso de lecto-escritura de cada uno de ellos.

5. ¿Cómo se comportan los estudiantes con autismo ante actividades en las que deben copiar o escribir?

A los estudiantes con autismo no les gusta escribir, se aburren, no tienen buena caligrafía, es algo que se les dificulta. Ellos por lo general tienen poco o más lento el desarrollo de su motora fina y gruesa, lo que influye en esta actividad, depende mucho en el nivel de trastorno de ellos.

6. ¿Cómo se comportan los estudiantes con autismo ante actividades en donde deben dibujar?

A estos estudiantes en general les gusta mucho plasmar sus ideas en dibujos y pueden llegar a ser muy creativos. Cuando dibujan a algunos esta actividad puede llegar a tomarles mucho tiempo ya que son perfeccionistas y se toman tiempo para detallar, pero disfrutan mucho este tipo de actividades.

7. ¿Cómo se comportan los estudiantes con autismo en actividades en las que deben colorear?

Esta es otra actividad que les gusta y disfrutan mucho. De igual manera les toma mucho tiempo, se esmeran por hacerlo bien y les gusta mucho combinar colores. Debido a sus problemas de motora, característicos del espectro autista, suelen salirse de las líneas y en ocasiones tienden a hacer rayones.

8. ¿Cómo se comportan los estudiantes con autismo en actividades donde deben utilizar pintura, plastilina, entre otros materiales?

Estas actividades también les gustan mucho dependiendo de la textura con la que estén teniendo contacto ya que hay algunas que no les gustan. Suelen ser muy desordenados a la hora de trabajar con diversos materiales, se ensucian mucho, ensucian las áreas donde trabajan y al final no les gusta recoger y limpiar.

9. ¿Cómo se comportan los estudiantes con autismo ante el uso de la tecnología?

Les encanta, es una actividad que los absorbe completamente. Considero que la efectividad de este recurso en chicos con espectro autista depende mucho del uso que el docente le de o la forma en que lo aplique. Por ejemplo, existen muchos juegos y prácticas con mucho contenido visual que a ellos les encanta y les refuerza contenidos de clase. Debe usarse con medida, hay que tener control sobre esto para que no se vuelva perjudicial para ellos.

10. ¿Utiliza usted alguna otra técnica o estrategia que le resulta efectiva para trabajar con estos estudiantes? ¿Cuál?

Creo que con ellos todo tiene que ver en la relación, entonces siempre intento tener una buena relación con ellos, de cercanía y darles esa confianza, ir "ganándoselos". Utilizo mucho el juego, el motivarles con premios o sorpresas, eso los atrae y hace que la clase les guste más. También trato de ponerles actividades de movimiento y les permito estar de pie ya que cuando están mucho tiempo sentados se inquietan y estresan.

Annex #6

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Interviewer: Arellys Molina Guzmán

Site: Alajuela

Date of interview applied: _____

**Entrevista a docente #2**

Indicator Observed: Different ways in which students with autism spectrum disorder can learn a new language.

Esta entrevista se realiza con el propósito de conocer su opinión en relación al manejo y enseñanza a estudiantes con algún trastorno del espectro autista integrados en grupos regulares. Así mismo, se desea conocer las técnicas que usted como docente aplica para trabajar con estos estudiantes y para manejar la ansiedad y frustración que ellos usualmente presentan. La investigación es realizada en inglés, sin embargo, esta entrevista se realizará en español para su mayor comodidad. Toda la información que se obtenga será utilizada únicamente con propósito investigativo, por lo que es totalmente anónima y confidencial.

1. ¿Cuáles son los rasgos de sus estudiantes con trastornos del espectro autista que usted considera son más difíciles de manejar en clase?

Creo que el temperamento, cada estudiante con espectro autista es y reacciona de manera diferente. Hay algunos que son muy pasivos y otros que por el contrario se irritan muy fácilmente y tienden a ser explosivos con sus reacciones.

2. ¿Cómo es la relación de los estudiantes con autismo y el resto de sus compañeros en el aula?

En los momentos en que he trabajado con chicos con espectro autista, su relación con los demás es excelente. Los otros niños generalmente los ayudan, comprenden e integran muy bien en la clase.

3. Cuando se presentan situaciones de estrés o frustración en estos estudiantes ¿Cómo las maneja usted?

Para mí depende del grado de autismo que tenga el estudiante, pero considero que es muy importante mantener una posición de autoridad con ellos, se debe ser muy firme al hablar, sostenerse en las palabras, ya que ellos comprenden muy bien cuando se les llama la atención. Se deben siempre mantener los límites.

4. ¿Cómo se comportan los estudiantes con autismo ante actividades de lectura?

Mis estudiantes con autismo en general disfrutan mucho la lectura, les gusta, muchos logran leer desde muy pequeños, lo hacen pausado, pero les encanta. Les gusta mucho participar cuando deben leer y demostrar su habilidad a los demás.

5. ¿Cómo se comportan los estudiantes con autismo ante actividades en las que deben copiar o escribir?

Ellos generalmente van a un ritmo muy lento, porque es un área que les cuesta un poco y cuando lo hacen suelen frustrarse o estresarse si no logran terminar. Personalmente he aplicado una estrategia más adecuada a ellos y que me ha resultado muy bien. Cuando escribimos o copiamos les brindo una ficha con el contenido que deben escribir para que ellos lo vayan copiando a su ritmo y así generarles menos estrés con el tema del tiempo. De esta forma si no logran terminar, pueden hacerlo en la casa sin ningún problema.

6. ¿Cómo se comportan los estudiantes con autismo ante actividades en donde deben dibujar?

Es una actividad que les gusta mucho, ellos son muy perfeccionistas entonces tratan de ubicar todo en su posición y dedican mucho tiempo al detalle. Tienen mucha habilidad en esta área, dibujan preciosos.

7. ¿Cómo se comportan los estudiantes con autismo en actividades en las que deben colorear?

Es algo que también les gusta mucho, siempre quieren poner color a todo. Lo hacen muy bien, por lo perfeccionistas que ellos son en general tratan de no salirse de las líneas lo que les toma mucho tiempo.

8. ¿Cómo se comportan los estudiantes con autismo en actividades donde deben utilizar pintura, plastilina, entre otros materiales?

Muy bien, también les gusta mucho, trabajan muy bien con este tipo de materiales, siguen las indicaciones y tratan de hacer muy bien su trabajo. Se exigen mucho a sí mismos y observan también mucho el trabajo de sus compañeros. En mi experiencia son muy ordenados en su espacio, suelen ser estructurados al usar los materiales, los organizan y mantienen todo en su lugar conforme lo van utilizando.

9. ¿Cómo se comportan los estudiantes con autismo ante el uso de la tecnología?

Muy bien, también les encanta, los atrae mucho. Cuando usamos tabletas la mayoría sabe cómo hacerlo. Les gustan mucho los juegos de armar y pintar, sin embargo, se debe usar con medida.

10. ¿Utiliza usted alguna otra técnica o estrategia que le resulta efectiva para trabajar con estos estudiantes? ¿Cuál?

Trato de establecer “turnos” para las explicaciones ya que a los chicos con espectro autista me gusta siempre reforzarles las instrucciones de manera individual, entonces doy la explicación general, me aseguro de que no haya dudas y procedo a explicar individualmente al o los estudiantes con autismo y trabajamos aparte. Los estudiantes llegan a adaptarse a que es el turno de sus compañeros con espectro autista y respetan ese espacio. Por otro lado, los estudiantes con espectro autista al ser tan estructurados, lo vuelven parte de su rutina y aprenden a esperar.

Annex #7

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Interviewer: Arelllys Molina Guzmán

Site: Alajuela

Date of interview applied: _____

**Entrevista a padres de familia #1**

Indicator Observed: Different ways in which students with autism spectrum disorder can learn a new language.

Esta entrevista se realiza con el propósito de conocer sobre su experiencia como padre de familia de un niño con trastorno del espectro autista en relación con su aprendizaje y educación. Así mismo, se desea conocer los métodos que le resultan efectivos para apoyarlo (a) y reforzar con él o ella en casa. La investigación es realizada en inglés, sin embargo, esta entrevista se realizará en español para su mayor comodidad. Toda la información que se obtenga será utilizada únicamente con propósito investigativo, por lo que es totalmente anónima y confidencial.

1. ¿Considera usted que es beneficioso para su hijo (a) formar parte de una escuela y grupos regulares?

Si, por supuesto. Considero que esto le permite socializar de una forma diferente y tener nuevas relaciones con las personas que la rodean y no solo en el ambiente del hogar. También le ayuda a adaptarse a una sociedad "neurotípica", los prepara para la vida real.

2. ¿Considera que su hijo (a) recibe técnicas y métodos apropiados para su aprendizaje?

Si, en la escuela en la que asiste actualmente si recibe apoyos y se buscan métodos que la benefician, sin embargo, en otras instituciones donde ella ha asistido no ha recibido apoyos ni ninguna atención debido a la falta de interés e inclusión verdadera. En algunas escuelas lamentablemente hay aún mucha discriminación para los estudiantes con condiciones diferentes. Actualmente le han brindado recomendaciones y demuestran mucha preocupación por su desempeño.

3. ¿Presenta su hijo (a) motivación e interés al asistir a la escuela?

Sí, está muy motivada, se levanta con facilidad cuando debe asistir a la escuela y muestra una buena actitud. También nombra a sus compañeros de la escuela y tiene amigos, lo que demuestra un gran avance en su área social.

4. ¿Cómo se comporta su hijo (a) ante actividades de lectura?

No le gusta leer, le gustan mucho las letras y las palabras, pero no leer. Cuando tiene que realizar actividades de lectura le ocasiona mucho estrés y no lo logra.

5. ¿Cómo se comporta su hijo (a) ante actividades en las que deben copiar o escribir?

Tampoco le gusta esta actividad, le provoca mucha frustración y estrés. Le gustan mucho los números y letras, pero disfruta pintarlos en forma lúdica. Se le dan cartones o papeles y los pinta con pinturas y lo disfruta mucho pero no le gusta escribir en cuadernos.

6. ¿Cómo se comporta su hijo (a) ante actividades en donde deben dibujar?

A ella le encanta dibujar, pero si el dibujo no le sale como ella esperaba se frustra, arruga la hoja y la desecha. Ella no demora mucho tiempo haciendo sus dibujos, pero si los llega a desechar, los hace de nuevo.

7. ¿Cómo se comporta su hijo (a) con actividades en las que deben colorear?

Le encanta colorear, se toma su tiempo cuando lo hace, intenta siempre no salirse de la rayita lo que representa un reto para ella. Cuando lo termina muestra sus dibujos con mucho orgullo. Le gustan mucho los libros para colorear.

8. ¿Cómo se comporta su hijo (a) con actividades donde deben utilizar pintura, plastilina, entre otros materiales?

Estas actividades le gustan mucho porque le gusta usar las manos y crear cosas, pero suele hacer mucho desorden cuando las realiza y eso la frustra mucho y la hace llorar porque no le gusta el desorden.

9. ¿Cómo se comporta su hijo (a) ante el uso de la tecnología?

Le encanta la tecnología, pero es muy importante dosificar su uso. Se enoja cuando se le quita, pero es por esto que son importantes los límites. Las actividades que realiza generalmente son las relacionadas con música, juegos, actividades de pintar y dibujar y también ve muchos videos con contenido educativo y de temas con los que ella tiene afinidad.

10. ¿Utiliza usted alguna otra técnica o estrategia que le resulta efectiva para el aprendizaje de su hijo? ¿Cuál?

A ella le favorece mucho el esparcimiento para mejorar la concentración y trabajar de una mejor manera por lo que suelo llevarla a correr, hacer actividad física, también jugar con agua la favorece mucho, es una actividad que la relaja y mejora sus conductas en todo lo que ella deba hacer.

Annex #8

Universidad Hispanoamericana

English Teaching Program

Topic: Strategies for teaching general vocabulary in English to students with autism spectrum disorder from six to eight years at Instituto Educativo San Gerardo in Alajuela during the second semester of 2021.

School: Instituto Educativo San Gerardo

Interviewer: Arellys Molina Guzmán

Site: Alajuela

Date of interview applied: _____

**Entrevista a padres de familia #2**

Indicator Observed: Different ways in which students with autism spectrum disorder can learn a new language.

Esta entrevista se realiza con el propósito de conocer sobre su experiencia como padre de familia de un niño con trastorno del espectro autista en relación con su aprendizaje y educación. Así mismo, se desea conocer los métodos que le resultan efectivos para apoyarlo (a) y reforzar con él o ella en casa. La investigación es realizada en inglés, sin embargo, esta entrevista se realizará en español para su mayor comodidad. Toda la información que se obtenga será utilizada únicamente con propósito investigativo, por lo que es totalmente anónima y confidencial.

1. ¿Considera usted que es beneficioso para su hijo (a) formar parte de una escuela y grupos regulares?

Para mi hija si porque es una parte muy importante para su integración, pero creo que no funciona con todos los niños, esto depende del grado de autismo que tenga, ya que en algunos casos más elevados no se comunican y pueden entrar en crisis al no poder expresarse ni comunicarse. Si es un niño con grado 3 severo es recomendable que tenga un aprendizaje en enseñanza especial porque son las instituciones con gente más capacitada para entenderlos y desarrollar los sistemas de enseñanza adecuados para ellos. Sin embargo, si es un grado 1 y 2 puede ser posible integrarlos con adecuaciones y atención más personalizada.

2. ¿Considera que su hijo (a) recibe técnicas y métodos apropiados para su aprendizaje?

Si, la escuela la ayuda a integrarse a la sociedad y le da calidad en enseñarla a ser independiente, a desarrollar habilidades. Se le recomiendan algunas terapias necesarias para alcanzar estos objetivos. Sin embargo, también hay

momentos en que ellos no van nivelados con sus compañeros y les falta apoyo para poder lograrlo.

3. ¿Presenta su hijo (a) motivación e interés al asistir a la escuela?

Por el asunto de la virtualidad, cuando debe ir si no le digo con anticipación, le muestro el uniforme y le repito muchas veces que debe ir a la escuela, puede entrar en crisis debido a su estructurada rutina. A ella no le gusta que le impongan cosas por lo que debe ser poco a poco. Antes de la pandemia ya ella tenía su rutina establecida y se levantaba todos los días con buena actitud para ir a clases. Con la llegada de la pandemia y las clases virtuales al principio se levantaba para ir a clases y no lograba comprender el cambio, le costó adaptarse y eso la indisponía.

4. ¿Cómo se comporta su hijo (a) ante actividades de lectura?

Le cuesta mucho, aún no lo logra. Le funcionan mucho los pictogramas para irse guiando y las ilustraciones, la motivan a que le atraiga más una lectura.

5. ¿Cómo se comporta su hijo (a) ante actividades en las que deben copiar o escribir?

Le cuesta mucho dimensionar las letras, se le dificulta la caligrafía, por lo que suele ser desordenada, separa todas las letras en las palabras o las pega casi una sobre otra. Lo logra con mucha guía y ayuda. A ella le funciona modelar las letras y palabras, la repetición o el ir uniendo, simulando rompecabezas con letras, usar dados de letras, pero la parte manual le cuesta por la motora. La escritura en cuaderno es muy complicada para ella.

6. ¿Cómo se comporta su hijo (a) ante actividades en donde deben dibujar?

No le gusta mucho, realiza formas básicas, cosas abstractas, sigue orden o estructura de localizar las partes del dibujo pero no le atrae mucho.

7. ¿Cómo se comporta su hijo (a) con actividades en las que deben colorear?

Le encanta, con cualquier material que pueda hacerlo. Tiene colores favoritos, ella los elige y combina. Le gusta mucho poner colores a todo.

8. ¿Cómo se comporta su hijo (a) con actividades donde deben utilizar pintura, plastilina, entre otros materiales?

Le encanta también, la desestresa mucho. A ella le gusta ensuciarse las manos y experimentar las texturas de los materiales. Le gusta mucho la textura de la plastilina, las arenas moldeables, el foam, experimentar con espumas de afeitarse, embarrarse de goma o silicón, el slime, es muy creativa y esto le ayuda a explotar sus habilidades.

9. ¿Cómo se comporta su hijo (a) ante el uso de la tecnología?

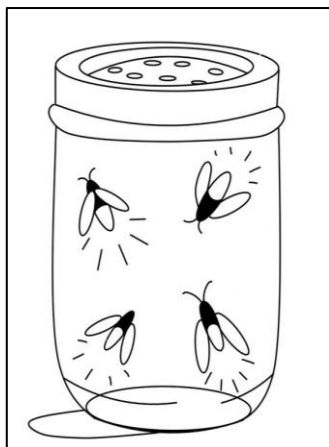
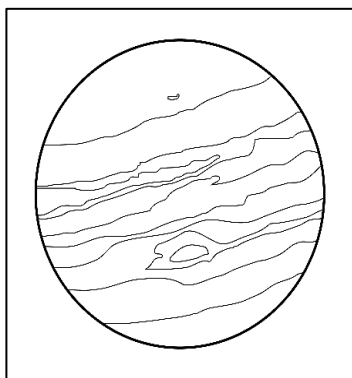
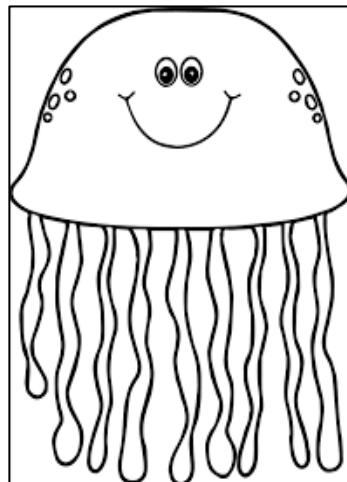
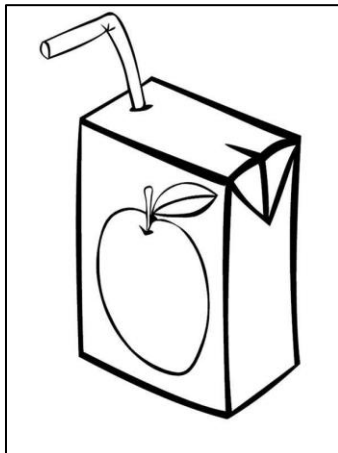
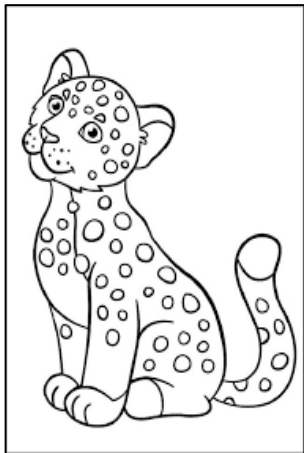
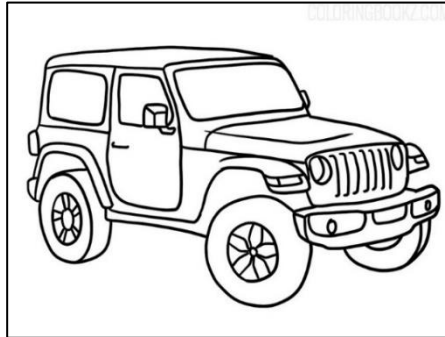
Le encanta la tecnología, sabe utilizar ipads y celulares, los entiende muy bien, sabe descargar apps, pero le tengo bloqueos para que no compre cosas, maneja la cámara, sabe hacer videos y editar fotos. Sabe entrar a YouTube y hace “pantallazos” de las partes que más le gustan de los videos que ve. Domina aplicaciones en inglés y las trabaja sola, sin ninguna ayuda. Usa muchas aplicaciones de cocina ya que le encanta la cocina. También aplicaciones educativas de armar silabas, rompecabezas, de música, de los animales, matemáticas, de secuencias, entre otras.

10. ¿Utiliza usted alguna otra técnica o estrategia que le resulta efectiva para el aprendizaje de su hijo? ¿Cuál?

Ella es muy visual, entonces utilizo muchos dibujos, pictogramas, imágenes que ilustren los contenidos que ella está aprendiendo. Me funciona muy bien porque ella tiene muy buena memoria visual. También al ser ella tan estructurada hacemos listas de los materiales que va a ocupar para ciertas actividades y los organizamos para que ella no se frustre a la hora de realizar asignaciones escolares. También es necesario especificar muy bien las instrucciones antes de que ella realice algo.

Annex #9

Making a book about the letter J



Jhon is a very adventurous boy. He enjoys going to the forest and seeing different animals. He also likes to jump in the piles of leaves he finds. He has a lot of fun!

When he arrived, he started walking through the forest. After an hour, he was thirsty, so he drank his orange juice.

Ops! Jhon caught a firefly! He put it the jar he had.

When Jhon was looking at the firefly and its bright shining, he started thinking about the universe and all its planets: Saturn, Jupiter, Mars, and the rest of them. He wants to be an astronaut someday.

One day he went to the forest in his jeep. He was driving happily. Jhon wanted to spend the day there.

Then, he saw an amazing jaguar. He was scared but it was a very exciting experience.

Jhon continued his trip. He was planning to catch an insect so he had a jam container.

As Jhon was walking, he found a river. There he saw a beautiful jellyfish floating in the water. He was amazed.

It was getting late and he had to go home but he was happy for all the adventures he had. He went home hoping to come back soon to the forest.

Annex #10

Introduction of the vocabulary



Jam



Jeep



Jaguar



Juice



Jellyfish



Jupiter



Jar

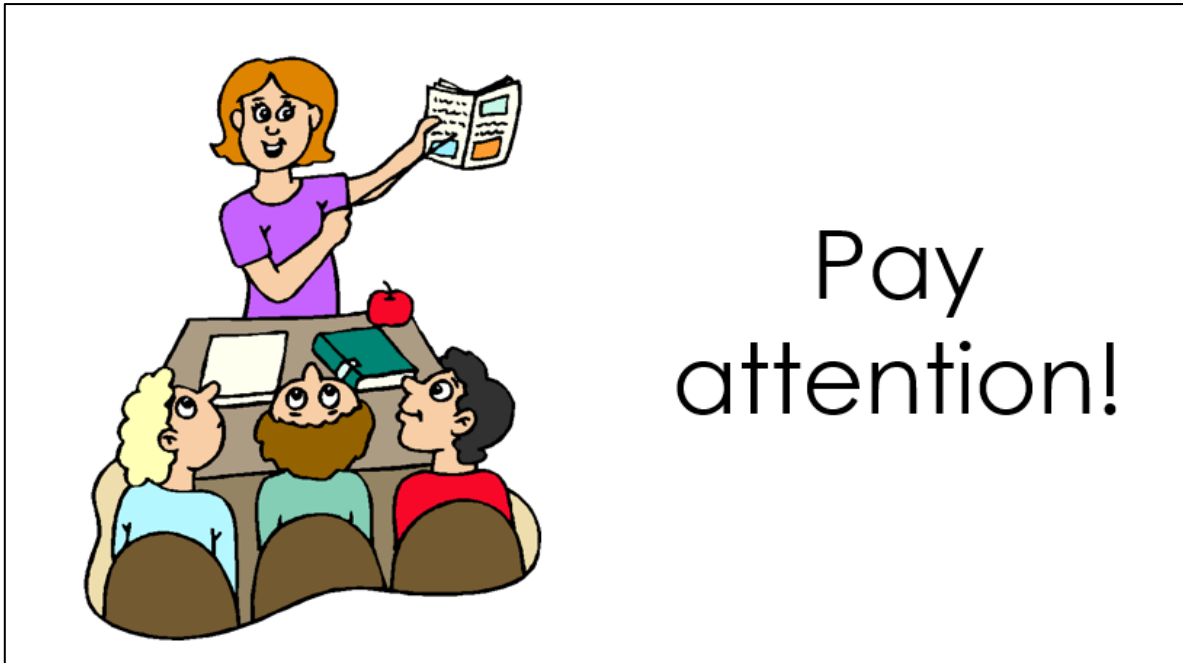


Jump

Annex #11

Chronogram

1. Listen to the teacher.
2. Listen to the song.
3. Repeat the words.
4. Copy the words from the board in your notebook.
5. Create a book.
6. Repeat the words.
7. Recess!!





Let's copy
from the
board!



Let's work in
the activity!

Annex #12

Timer

Online-stopwatch. Online Stopwatch. (n.d.). Retrieved December 31, 2021, from <https://www.online-stopwatch.com/eggtimer-countdown/>

