High-Functioning Autism Spectrum Disorder in the English Classroom

A qualitative study on how teachers foster students' communicative skills

Högfungerande Autism i det engelska klassrummet
En kvalitativ studie om hur lärare främjar elevers kommunikativa förmåga

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Abstract

When it comes to second language learning, there is one approach that is generally regarded as the core of language development and seen as one of the best ways to develop communicative skills. This method is used in Swedish schools and is known as immersion and social interaction. It allows the learner to receive input (through reading and listening) and to express output (by writing and speaking). While this approach works for most people, it causes difficulties for individuals with High Functioning Autism Spectrum Disorder (ASD). The education provided in Swedish schools has to be equitable by law and, if necessary, be adapted to each individual student. This qualitative study aims to investigate how teachers of students with High Functioning ASD adapt their education and face the challenges that arise due to the students' disorder. To accomplish this task, I interviewed four teachers, from three different cities, who have various experiences of teaching English as a second language to students with High Functioning ASD. The conclusion was that teachers attempt to recreate genuine conversations that reflect everyday situations and do not neglect the students' education because of their limitations. Instead they create good relationships with the students so that they are able to challenge the students and continue to use targeted social interaction in their teaching.

Keywords: High Functioning ASD, Social interaction, Communicative skills, L2 acquisition, Equitability and School

Sammanfattning på Svenska

När det kommer till andraspråksinlärning finns det en metod som anses både vara kärnan till språkinlärning, samt det bästa sättet att utveckla kommunikativa förmågor. Denna metod används i svenska skolor och är känd som immersion och social interaktion. Denna metod innebär att eleven både ges stimulans via läsande och lyssnande, och möjligheten att producera skrift och tal. Även om denna metod fungerar för de flesta elever, skapar den svårigheter för individer med högfungerande autism. Undervisningen som ges i svenska skolor bör enligt lag vara likvärdig, samt om behovet finns, vara anpassad till varje individ. Denna kvalitativa studie syftar till att undersöka hur lärare till elever med högfungerande autism anpassar sin undervisning och tar itu med utmaningarna som uppkommer på grund av elevernas funktionsnedsättningar. I denna studie har jag intervjuat fyra lärare från tre olika städer och som har olika erfarenheter. Slutsatsen blev att lärare försöker återskapa genuina konversationer som speglar vardagliga situationer och inte försumma elevernas utbildning på grund av deras begräsningar. De kommer med andra ord fram till lösningar som övervinner dessa hinder.

Nyckelord: Högfungerande Autism, Social interaktion, Kommunikativa förmågor, Andraspråksinlärning, Likvärdighet och Skola

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1. Introduction

Each individual absorbs information and learns differently, especially when learning something more complex, like a second language. We do not develop at the same pace, nor share the same communicative skills as other people (Tooby & Cosmides, 1990). In other words, every individual requires a different amount of time to learn a new language and to use it effectively. At the same time, The Swedish National Agency for Education mandates that every teacher has to adapt his or her teaching so that it caters equitably for every student in the nation (Skolverket, 2011). For the teacher, the time spent on creating an equitable education may differ depending on how many students he or she has to take into consideration. Additionally, there are students who have learning disorders, such as High Functioning Autism Spectrum Disorder (ASD), who find it difficult to communicate and interact socially with other people (Hay & Winn, 2012), primarily because they have difficulties perceiving other viewpoints, thoughts, and needs (Foudon, Reboul & Manificat, 2007). While Typical Development (TD) children acquire a first language through immersion, children with ASD need extensive speech therapy support and a very different lesson plan in order to be successful (Foudon, Reboul & Manificat, 2008).

There are various methods and approaches to learning and teaching a new language, which present the teacher with a variety of tools to adapt the education to each individual student. While social interaction is regarded as a corner stone to language development and one of the most important approaches to learning a new language (Hamers & Blanc, 2000), it poses obstacles for those with High Functioning ASD disorder that both the teacher and the student need to overcome.

According to the curriculum, students are assessed on their communicative skills, a term that in the knowledge requirements involves reception, production, and interaction (Skolverket, 2011). In order to achieve a passing grade (E or better) in English courses, students have to pass all three aspects. While the education of all students across the nation has to be fair and equitable, the National Agency for Education is aware that there are some students who need an exception and has therefore arranged a law to accommodate these students. The exceptions agreement (SFS 2010:800) gives teachers the authority to disregard specific parts of the knowledge requirements, which makes it possible for special case students to receive an appropriate grade and fair assessment. However, this solution does not work for every single case and is not a general solution to the matter. While some argue a disorder is connected to a permanent diagnosis, others posit that every individual is different and responds differently to a disorder, as in this case, ASD (Foudon et al., 2007).

The purpose of this essay is to evaluate the possibilities of creating an educational system that is fair, equitable and adaptive for ASD students and their needs. This is especially important for students with High Functioning ASD in terms of developing their communicative skills when learning their second language, English. Because their ability in social interactions is limited, the curriculum has to be tailored

to their needs, in order to be effective for them as well as meet the requirements in providing equitable education to every student while complying with school law (SFS 2010:800).

   One of the main purposes of English education in upper secondary school in Sweden is to help developing students' communicative skills, on which they are also assessed. Social interaction is considered the best approach to gaining and developing communicative skills in a second language (L2), while at the same time it is one of the general shortcomings of individuals with High Functioning ASD (see section 2.2). Even though a teacher is able to apply the exceptions agreement in some situations, this cannot be regarded as a general solution. As a result another question arises, namely whether the curriculum and the school really are equitable for every individual student as required by law (see section 2.4). The aim of this research is therefore to answer the following question:

Since social interaction is considered a prominent factor in learning and developing an individual's communicative skills in a L2, how do teachers of students with High Functioning ASD adapt their education and face the challenges that arise due to the students' disorder?

2. Literature review

The purpose of this section is to give the reader a deeper understanding of what ASD, communication, and communicative skills are. Presented in the five subsections below, I will look at how students with High Functioning ASD, in contrast to TD students, acquire a L2 and improve their communicative skills. Additionally, in subsection 2.1, the reader is provided with background information on Autism Spectrum Disorder (ASD), and general information on what the disorder implies. Subsection 2.2 features information on how students with ASD acquire a language, but also how the language acquisition of individuals with ASD differs from that of TD students. Subsection 2.3 defines the terms 'communication' and 'communicative skills', and provides examples of how these terms are relevant for ASD students in a school environment. Subsection 2.4 provides insight on the 'exceptions agreement' and other policies relevant for ASD students in school. In the final subsection, 2.5, the overall purpose of this study together along with the research questions will be presented.

2.1   Background on Autism Spectrum Disorder (ASD)

Autism or Autism Spectrum Disorder (ASD) is a lifelong developmental disorder that affects approximately <1% of the world's population (Newschaffer et al., 2007), and is primarily found in boys. The word "autism" derives from the Greek word *autos*, which means "self" (Longman Dictionary). The terminology of the word is primarily grounded in the ability of human beings to have a Theory of Mind

(ToM), a notion referring to the skill of someone to understand and recognize other people's thoughts, feelings, and actions. ToM is one of the most important conceptions to describe the way individuals with ASD encounter the world, and is something all autistic children lack to varying degrees (Foudon et al., 2008). When examining whether or not a person has ToM, the ability to anticipate what will happen next in various scenarios, as well as the ability to anticipate what other people think and feel is tested. Individuals with ASD, who lack aspects of ToM, are perceived as being isolated, and in some cases even as egocentric. This is primarily due to the fact that they have difficulties in perceiving other people's viewpoints, thoughts, and needs, and instead mainly understand the world from their own perspectives (Callesen, Cour & Christensen, 2010).

The disorder has a wide range of forms, with various features. ASD can emerge in either a mild or a severe form where the affected person may or may not have other handicaps or a reduced mental capacity (Frith & Happé, 1994). ASD usually co-occurs with disabilities such as visual and hearing impairment, epilepsy and other developmental disorders (Autism & Aspergerförbundet, 2017). This means that children who are severely autistic usually do not acquire the ability to speak (Foudon et al., 2008). Individuals who are able to develop a language nevertheless maintain limited ability as regards expressions and comprehension (Autism & Aspergerförbundet, 2017). Some individuals that have ASD are able to understand and use spoken language, while others are not able to do so, and instead more accurately imitate sentences without possessing the ability to use them when communicating (Autism & Aspergerförbundet, 2017). Throughout this thesis, the primary focus will be on High Functioning ASD, a term which implies that the individual has an IQ that is considered at least average and that he or she has the ability to successfully finish high school, regardless of the educational support received (Zeedyk, Tipton & Blacher, 2016). These are individuals who acquire a language later than TD children, but eventually learn to communicate with other people (Foudon et al., 2008). Children with High Functioning ASD are still limited in the level of language proficiency they are able to reach, primarily since their development progresses more slowly than that of TD children. In other words, "they never catch up: in adulthood, High Functioning autistic people (with normal IQ) do not reach the language level of normal adult people" (Foudon et al., 2008, p.47).

2.2   ASD and language acquisition

There are various indications when a child is affected by ASD, and the main one is when the child has not developed an appropriate language for his or her age. Autistic children are usually diagnosed by the age of 30 to 36 months, which is when a delay in language acquisition becomes evident in comparison to a TD child's language acquisition (Foudon et al., 2008). To put this in perspective, TD children

generally produce their first words by the age of 11 months, while children with ASD usually utter their first words by the age of 38 months, which is the first indication that the language acquisition of children with ASD is different from TD children (Foudon et al., 2008). In addition, the language acquisition of children with ASD and TD children differs since TD children acquire a language through immersion, while children with ASD generally need extensive speech therapy support in order to be able to speak (Foudon et al., 2008). Even though each individual has to be evaluated separately, since one cannot make general claims in the tendencies of ASD children, individuals with ASD, usually, have a limited ability to communicate, especially in terms of drawing conclusions, describing things and discussing various topics (Foudon et al., 2007).

Additionally, language acquisition in TD children differs from ASD children in that the Mean Length of Utterance (MLU) increases very slowly or stabilizes during their early age development, which indicates that it is limited in comparison to TD children's whose MLU increases over time (Foudon et al., 2007). MLU measures the morphemes an individual uses per utterance and is used to assess his or her grammatical development. It therefore provides evidence for the relationship between language impairments and language development (Sandbank & Yoder, 2016):

> Although MLU does not directly measure the grammatical complexity of an utterance, there is much evidence to suggest that these two aspects of language development are closely related [in] children who are typically developing and some evidence to support this relation in children with language impairments or delays (Sandbank & Yonder, 2016, p.241).

TD children's vocabulary is larger than that of ASD children, whose vocabulary is limited, which results in their linguistic expression and ability to communicate being restricted. However, by increasing the ASD children's referential vocabulary, which means that the child is taught what specific words relate to, for example, by making the child understand that the word car is that four wheeled vehicle that the parents use to get to work every morning, there is a possibility that syntactic development is activated. Thereby the individual will eventually become better at understanding the grammatical rules of the language (Foudon et al., 2007).

Throughout this thesis, I primarily focus on Second Language Acquisition (SLA), more specifically, on how children with High Functioning ASD acquire and develop their communicative skills in a second language (L2), in this case, English. SLA is a process of learning an additional language, or a so-called second language, although it might in reality actually be the third or fourth language that the individual acquires (Saville-Troike, 2006). SLA is a process of high complexity, primarily since numerous factors and circumstances of social, cultural and economic nature come into play. Social interaction is, according to Hamers & Blanc (2000), one of the most important approaches to learning a new language,

primarily since it facilitates the SLA process. The reason is that social interaction encourages communication and helps the learner to notice existent information gaps while receiving input and producing output (Muho & Kurani, 2011). Social interaction refers to a process and the mutual influence between two or more people that occurs in various contexts (Bardis, 1979). To demonstrate, "[a] stranger, for instance, may ask where the nearest hotel is, and another person may supply the needed information. The question, in this case, is the stimulus and the information given is the response" (Bardis, 1979, p.148). However, since these two individuals are mutually able to act towards each other in uncountable ways, the response in this situation may as well create a new stimulus and thereby lead to more answers and so forth. In other words, the speakers are socially interacting.

As mentioned previously, social interaction is an ability that is regarded as being negatively affected in children with ASD. Nevertheless, Wire (2005) suggests that even though individuals with ASD find it difficult to interact socially with other people, social interaction plays an important role in SLA and in life in general. "Social interaction is a crucial part of foreign languages work and the pupil with ASD can potentially derive enormous benefit from interaction with others, which may enhance the quality of his whole future" (Wire, 2005, p.5).

2.3   Communication and communicative skills

Based on the triad of impairments related to ASD, children with High Functioning ASD primarily have difficulties with three aspects: social interaction, social communication and imagination (Wire, 2005). Therefore, language development is not the only factor that is assessed when trying to determine if a child has ASD. Indications regarding the ability for social interaction, social communication and the ability to imagine, which affect the child's playfulness, interests, behavior, and imagination, are also reviewed before he or she is diagnosed with ASD. In connection to this, it is important to note that ASD children's communicative limitations are not caused by inadequate language proficiency. Instead, they result from a lack of competence in social interaction and in understanding the purpose of communication, which in turn is a result of their lack of reciprocity (Autism & Aspergerförbundet, 2017).

Communication is a social process where one produces and gives value to information. The process forms relationships between people by exchanging knowledge, emotions, and thoughts (Çimen, 2016). Based on this definition, communication is a psychosocial process. In connection with communication, communicative skills consist of learned behaviors that simplify the living in a society and is yet also built upon relationships, emotions, and thoughts (Çimen, 2016). This definition states that communicative skills should be regarded as important for every individual, regardless of disability and

profession since it has a major importance in how an individual functions within a society. In addition, studies have shown that a teacher's communicative skills have a direct impact on his or her pupils' success in school (Çimen, 2016).

In further relevance to the school environment, the aim of the curriculum for English teaching in upper secondary school in Sweden is to help and motivate students to improve their knowledge of the language, their *overall communicative skills* in English, their confidence, ability, and desire to use English in various contexts and purposes (Skolverket, 2011). In order to achieve this aim, the teacher should adapt the education to the students and focus on the immediate learning environment. This builds upon motives, such as the impact of the teacher, the curriculum, the classmates, and the experience of success. Dörnyei & Ushioda (2009) propose that one component that affects the learner's intrinsic motivation is the L2 learning experience. Therefore, by adapting the education to the students and presenting them with activities that are perceived as meaningful, the teacher will be able to help students become more intrinsically motivated to acquire a second language. This would probably be the ultimate goal for every teacher since intrinsic motivation focuses on the learner's personal interest to learn a second language. In contrast, extrinsic motivation focuses more on the results and external motivation factors, such as a grade or a reward for example (Dörnyei & Ushioda, 2009).

The *communicative skills* mentioned primarily refer to reception, production, and interaction (Skolverket, 2011). In other words, the student should be given an opportunity to develop his or her ability to understand and use language both verbally and in writing, but also be able to interact with other people in various contexts and with complexity, variation, and precision (Skolverket, 2011). As mentioned previously, based on the triad of impairments, interaction and production are characteristics related to, and affected negatively by the ASD students' disorder and may, therefore, create controversies in terms of assessment. Despite this, English class in Sweden has its benefits. The curriculum and its focus on communication allows the teacher to create an environment where both TD and ASD students are given the opportunity to interact and engage in conversations with each other, which is essential for the development of their social skills, but also their language proficiency (Wire, 2005). In other words, even though social interaction is part of the disadvantages of ASD, as teacher one should not neglect it in the education of children with ASD.

2.4   ASD in Swedish schools

Given that the assessment of ASD children's communicative skills may create problems, there is an exceptions agreement in the school law (SFS, 2010:800, chapter 15, §26), allowing the teacher to disregard specific parts of the curriculum when assessing a student with special needs, needs that are not of temporary nature. Another condition for using the exceptions agreement is that the disability has to

affect the student to a degree that makes it impossible for him or her to pass a particular knowledge requirement. However, a teacher must consider each student as an individual rather than making decisions based on the characteristic features of a disability in general (Skolverket, 2017). In other words, every case is considered different, and each individual is evaluated separately. Therefore, applying the exceptions agreement is not an option for every individual student with High Functioning ASD.

Also, according to the school law:

> Teaching should be adapted to each pupil's circumstances and needs. It should promote the pupils' further learning and acquisition of knowledge based on pupils' backgrounds, earlier experience, language and knowledge. The Education Act stipulates that the education provided in each school form and in the recreation center should be equivalent, regardless of where in the country it is provided (Skolverket, 2011, p.5).

Even though many teachers may have different ideas as to what the actual definition of equitability is, a general definition of equitability in a school environment is that the education provides equal access to and equal quality of teaching to every student, but also that the school compensates and gives support in adverse circumstances that might occur (Lindblom, 2015).

However, equitability in school is a complex concept that in reality does not have a determined measure. Therefore, it is close to impossible to state whether the education offered in different schools is equal or not. One of the main reasons for this has to do with the social relationships that occur in the school environments (Lindblom, 2015).

Nonetheless:

> The school should promote understanding of other people and the ability to empathise. No one in school should be subjected to discrimination on the grounds of […] functional impairment, or to other forms of degrading treatment. All tendencies to discrimination or degrading treatment should be actively combated. (Skolverket, 2011, p.4).

In other words, even though every school in Sweden has to offer an equitable education in terms of access, quality and compensation for adverse circumstances, it is close to impossible to measure, and thereby confirm, whether this is achieved or not. Thus, since no one shall be exposed to discrimination, it is, from a teacher's perspective, important to at least do what is possible in terms of adapting the education and giving every student the same opportunities. Since children with High Functioning ASD find it challenging to get accustomed to new things, such as schools, teachers, and subjects, it might create some obstacles if the teacher one day decides to change some of the routines. However, by

creating a good relationship where the teacher and the student have mutual respect for one another, he or she will be able to retain the relationship and avoid the complications that might occur (Wire, 2005).

3. Methods

3.1   Design

I chose a qualitative research design for my data collection, in this case, semi-structured interviews with a predetermined set of questions (provided in appendix 1). In comparison to a quantitative research method, this approach permits the respondents to express themselves more freely, but also more in depth, which in turn allows me to gain a deeper understanding of the subject matter and the more experienced teachers' perspectives, which will be valuable in my future profession (Trost, 2010).

Nevertheless, the chosen method and the small number of respondents had a few limitations. Since it is a small study it will prevent any generalization of the results as well as any claims made. However, areas of interest that are found might be studied in further research (Bryman, 2012). Also, what is presented throughout this research paper is what the teachers reported about their practices, but not something that I personally observed. It is well-known that self-reported data are not always very reliable (Bryman, 2012). "Two issues that threaten the credibility of self-reported data stand out: social desirability bias and halo error" (Gonyea, 2005, p. 82). Therefore, it would be good to have interviewed some of the ASD students as well, which would allow me to regard the matter from their personal experiences. Also, to make this study more reliable, I could have used various sources of data to compare the results with, or triangulation instead of, as in this case, solely relying on self-reported data (Gonyea, 2005).

In addition, I have informed all of the respondents about their rights, chosen locations where I hope they feel comfortable, and simply done my best to abide by the presented ethical policy. In spite of this, according to Trost (2010), there is a risk that my previous relationship to the respondents (see 3.2) may have contributed to them trying to provide me with answers that they believe I want to get, which additionally may have had a negative impact on the reliability of this study.

3.2   Sample and Respondents

Throughout this research, I used a convenience sampling, where I through personal connections approached six respondents based on their profession, gender, experiences, age and location. Unfortunately, two female respondents were not able to participate in this study, which resulted in a study consisting of four male respondents. In particular, the respondents needed to be English teachers in upper secondary school with some experience in teaching students with High Functioning ASD in their second language, English. Therefore, I chose to interview four individuals, two of whom currently teach only High Functioning ASD students. The other two respondents are primarily English teachers of TD

students, with one of them currently also teaching a small number of students with High Functioning ASD, and the other one having had some prior experience of teaching ASD students.

The first respondent was a male English teacher who currently exclusively teaches students with High Functioning ASD in a regional city in the western parts of Sweden (C1), and has more than twelve years of experience in this particular field. Since he has been teaching English as a second language to both TD students and ASD students, he was able to share his views from both experiences. This teacher will hereafter be referred to as TASD1.

The second individual I chose to interview was a male who currently also exclusively teaches ASD students, yet has several years of experience in teaching English to TD students. He works at the same school as TASD1, which therefore also is located in C1. He was chosen for the same reasons as TASD1, because of his experience and wide perspective on the matter. This teacher will hereafter be referred to as TASD2.

The third English teacher that I interviewed was a male who primarily teaches TD students in a regional city in the eastern parts of Sweden (C2). This individual does not share TASD1's or TASD2's extensive experience of teaching, even though he teaches a couple of students with ASD. I chose to interview him in order to be able to take advantage of a perspective from someone who is not used to adapting his education as frequently as the others. Also, since the respondent works in another city, there might be other policies and methods to address students with ASD in their statement of intent for students with the need for individual support. This teacher will hereafter be referred to as TTD1.

The fourth and final respondent I chose to interview was a male who exclusively teaches TD students in another regional city in the western parts of Sweden (C3), which is a suburb to C1 and therefore shares the same policies. He does not have any major experience in teaching English as a second language to ASD students. Nevertheless, he has some experience as a substitute teacher for ASD students. The reason for choosing him was because he is not as used to adapt his education as regularly as TASD1 or TASD2, nor does he have the working experience that they have, which might show in his answers. He will hereafter be referred to as TTD2.

I decided to look at the matter from two different perspectives, the perspective of those with experience of teaching ASD students on the one hand, and those without that same extent of experience on the other hand. By doing this, I am eventually able to make a comparison, and thereby see if the teachers teach social interaction and communicative skills differently.

Table 1. Introduction of the respondents

Teacher ID	Gender	Currently teaches	City	Experience	Reason for selection
TASD1	Male	ASD Students	C1	Has taught English to both TD students and ASD students for over a decade.	Experience
TASD2	Male	ASD Students	C1	Has taught English to both TD students and ASD students for over a decade.	Experience
TTD1	Male	TD Students + a few ASD Students	C2	Has been teaching TD students and a handful of ASD students for a year.	Not used to frequently adapt his education and lives in another city.
TTD2	Male	TD Students	C3	Has been working as a substitute teacher for ASD students, but is currently explicitly teaching TD students.	Able to compare and contrast between both perspectives.

3.3   Interview guide and procedure

Three of the interviews were performed at the respondents' working places. As TTD1 lives in another city (see Table 1), I was able to interview him while he was visiting the local university. That particular interview took place in a group room. It was essential that the interviews took place in an environment that the respondents found relaxing and comforting so that they were put at ease and so that I could get the most out of the interviews. The interviews took approximately 25-30 minutes each and were conducted in Swedish, since it is all of the respondents' mother tongue. By conducting the interviews in Swedish, the respondents were able to express themselves more naturally and relaxed.

I began each interview by greeting them, and informing them about the purpose of the study. I did this to make the respondents more comfortable. Afterwards, I told them how long I estimated the interview would be, that their identity would remain confidential and that the information shared by them would only be passed on in anonymized form, and that they had the right to cancel the interview at any time or to skip specific questions. Before I began asking my questions, I asked the respondents if I had their permission to record the interviews with my phone since I needed to keep the material for transcriptions, which I had in all cases.

During the interviews, it was important to remain focused on the purpose of the study and to obtain extensive information. In order to do so, I used an interview guide (see Appendix 1), and followed up on

my questions by using a method called probing, which means that I avoided using terms such as, 'why?' or 'how come?' instead using expressions such as, 'tell me more', and 'please elaborate'. By doing so, I was able to turn short answers into more developed ones, and thereby have a deeper conversation, which led to more data (Egidius, 2008). Also, it was important to always keep eye contact and not to interrupt the respondents, as well as providing time for reflection.

At the end of the interviews, the respondents were asked if they wanted to add anything, and told that, if something came up afterwards, they could contact me any time. Finally, I asked them if they wanted to receive a copy of the work when it was done, which they wanted, and thanked them for their participation and for taking their time.

3.4 Method of Analysis

I chose to analyze the material by using a method called 'grounded theory with open coding' (Bryman, 2012). I began by executing and transcribing the interviews. Thereafter I used a process called open coding, where the data were examined, broken down, conceptualized, compared and eventually gathered into five (plus one) categories or themes (see chapter 4) (Bryman, 2012). This process was performed until a theoretical saturation was met. Theoretical saturation implies that a point is reached where there is no further need to review the data to understand how suitable they are for the presented categories or themes (Bryman, 2012). This resulted in a flexible compilation since I found it easy to find patterns and draw conclusions thereof, but it also allowed me to obtain as much as possible from the data.

3.5 Ethical considerations

All of the respondents were aware and informed of their rights (Trost, 2010). The respondents were allowed to cancel the interview at any time or skip specific questions. Also, they were aware that everything they said would be passed on in an anonymized form, and that the data was only going to be used for this study and this research purpose. Therefore, it was important that the data was confidentially stored. In order to prevent unexpected problems, the audio files were anonymized before they were stored and transmitted to a USB stick with a password that only I had access to, and these files were erased as soon as the transcriptions had been done (Trost, 2010). It was important for me to be carefully prepared for any situation where there might have been a risk for me to insult their integrity, for example, when dealing with uncomfortable situations, or how I was preserving the material (Trost, 2010).

4. Results

The analysis of the interviews resulted in five main categories (see figure 1) that are related to the research question. These five main categories are *The importance of building good relationships, ASD students' communicative competence, English teachers' experiences of using social interaction to help students develop their communicative skills, Teachers' attempts to create fair assessment and an equitable education,* and *The need to show additional consideration when educating students with ASD.*

The importance of building good relationships	ASD students' communicative competence	English teachers' experiences of using social interaction to help students develop their communicative skills	Teachers' attempts to create fair assessment and an equitable education	The need to show additional consideration when educating students with ASD

Figure 1. The study's main themes emerging from the interview data.

The analysis also resulted in an additional, and somewhat unexpected, outcome. This additional outcome is not directly related to the research questions, but is noteworthy as such, and is thus presented separately. In this category, one further aspect has been identified: *ASD students perform better in English than in Swedish*.

   The first main category (4.1), *The importance of building good relationships,* demonstrates the positive outcomes of building good relationships, it also provides information on how good relations are built. The second main category (4.2), *Students with ASD's ability to communicate,* presents the respondents' experiences regarding their ASD students' communicative skills. The third main category (4.3) *English teachers' experiences of using social interaction to help students develop their communicative skills,* builds upon the respondents' experiences of working with social interaction in the classroom. The fourth main category (4.4), *Teachers' attempts to create fair assessment and an equitable education,* is about the respondents' reflections on experiences in creating an equitable education, especially for ASD children, and adapting the education so that it caters to every individual student. The fifth and final category (4.5), *The need to show additional consideration when educating students with ASD,* regards respondents' self-reflections when comparing and contrasting their professional roles in their classrooms.

   Section 4.6 is based on interesting material and presents an illustration of the study's additional outcome. The findings are not directly connected to the research question, but deserve to be a part of this study since they relate to the topic, and could be interesting for future research. *ASD students perform*

better in English than in Swedish presents TASD2 and TASD1's ideas and experiences regarding their students' performances in their subjects (Swedish and English). Throughout each of the following subsections, I primarily present and discuss the respondents' answers in connection to prior research. I have chosen to discuss and highlight the quotes that are the most representative of this research's findings and relevant to the research question.

4.1   The importance of building good relationships

All of the respondents highlighted the importance of creating a good relationship with ASD students, since it allows them to challenge the students without any major hardships. TTD1, TASD2, and TASD1 also mentioned that they do not avoid using social interaction as a method to help students develop their communicative skills. Even though they regard the method as difficult to work with, they put time and effort into building good relationships that can be challenged before presenting the students with tasks and assignments that are experienced as being boring or difficult. Therefore, based on the teachers' responses, it is very important to put time and effort into building relationships with ASD students.

In connection to prior research, Wire (2005) mentions that ASD students find it challenging to get accustomed to new things, such as teaching methods. Therefore, it is important that the teacher retains his or her routines, as spontaneous changes may cause discomfort. However, these challenges could be avoided by having teachers put time and effort into building good relationships, relationships that are based on mutual respect, which is precisely what these respondents are doing. By doing so, the respondents are able to use social interaction successfully in their education and thereby help the students to develop their communicative skills.

TASD1 states that before a teacher is able to proceed with an evaluation or assessment, he or she has to build a relationship that stands to be challenged:

> In an operation like ours that consists of students with Asperger's Syndrome and High Functioning Autism, relationships become very important. Before one is even able to proceed with evaluations and assessments one has to build some form of relationship that endures being tested […] and then maybe navigate the students towards more formal types of conversation (TASD1, my translation).

Interestingly, what he says has to do with creating an equitable and fair assessment as well, since this allows the teacher to give the students an opportunity to demonstrate and be assessed on all of their knowledge, for example, their abilities to perform in formal conversation. TASD1 also says that putting time and effort into building good relationships is one of the best pieces of advice he has since it allows him to challenge his students:

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If one would challenge a student without have created a relationship, the student would easily feel that he or she hates, or at least, dislikes the English teacher, either way, it would not end up well. However, by creating a relationship, one is able to push the student much harder and make him or her to come along. That is one of the best pieces of advice I have (TASD1, my translation).

TTD1 presents other advantages of building good relationships with ASD students, even though what he says can be applied in TD students' classrooms as well. He mentions that:

Some of these students are afraid of speaking in public and find it challenging to interact with other classmates, so I try to work with the atmosphere and relationships in the classroom, in order to make the students feel more relaxed and for them to perceive the setting to be forgiving, in other words, a setting where it is permitted to commit errors (TTD1, my translation).

By creating an environment that accepts mistakes, the students will probably dare to challenge themselves, which according to Skolinspektionen (2016) will develop and increase the students' comprehension. A student whose mental capacity is moderately challenged by difficult tasks develops much faster than a student who does not receive challenging assignments. Also, by providing the students with reasonably challenging tasks, the teacher is able to retain the students' motivation for education (Skolinspektionen, 2016).

According to TASD2:

It is important to have an open climate, to begin by establishing a class atmosphere where the students understand how to behave towards one another […] and if minor differences arise, I try to resolve them within the group so that I can keep them together (TASD2, my translation).

TASD2, like TTD1, focuses on the atmosphere in the classroom. He does not only highlight the relationship between teacher and student, he also emphasizes the relationship between the students. He sees a value in keeping the group together, instead of individualizing the students too much. This makes it possible for the students to interact with each other more frequently and thereby to hopefully develop their communicative skills.

Regardless of the teachers' background, TASD1, TASD2, and TTD1 highlighted the importance of building good relationships. By having a good relationship with the students, the teachers perceive it possible to challenge the students, assess them in a fair way, spark their will to learn, and to use social interaction in their teaching. Eventually, this will hopefully help students to develop their communicative skills without having to adapt the education extensively.

4.2 ASD students' communicative competence

TASD1, TASD2 and TTD1 experienced that their students appreciate English class more and prefer speaking English more when they first begin upper secondary school than when they are about to finish it. As the education through each year becomes more formal and as the teacher moves away from "everyday English" and focuses on topics such as grammar or literary analysis, they experience a change in student attitudes towards English; students start perceiving English as boring and much more difficult. TASD1 states that:

> My experience is that many of the students who come here have good communicative skills, they have some form of a "chatty English" that they speak with good fluency. Many of these students could be gathered around a table and discuss various topics and would be able to do so, even though they do this through an informal language, with many cursing words and phrases that they pick up from the gaming world and TV. Their writing is often much weaker, but primarily they perform worse as the language becomes more formal (TASD1, my translation).

When being asked if he has an idea for why students perceive English to become more difficult throughout upper secondary school, TASD1 explains that he believes that it is because the language becomes too formal and restricted by linguistic rules. He mentions that:

> Here in upper secondary school, the curriculum focuses more on how one constructs argumentative essays and how one can produce and improve one's own texts, which is what I referred to when I said that it becomes more formal. One can say that the education becomes more reflective on the actual language. What I believe happens is that many of the students feel that English becomes more boring, probably as boring as students perceived Swedish to be. They get an impression that it is more restricted, it is not as free anymore. The difference is that this has already happened in Swedish, probably during elementary school, since they have come further in the language development of their mother tongue. During upper secondary school they reach a higher level of their second language learning, which makes the education more difficult, which is what I believe to be the big difference (TASD1, my translation).

TASD2 shares a similar experience as TASD1 on this matter, he mentions that:

> I need to touch upon deeper topics when teaching Swedish than when I teach English. Throughout English 5, many of the students manage to get away with their informal English. So they live in an international world in comparison to when I was younger, English is spoken a lot and many movies are being watched etc. The students communicate with other people on the

Internet through English. Swedish class is more scientific and formal and therefore they find it more difficult and less fun (TASD2, my translation).

So based on TASD1 and TASD2's experiences, the students have better communicative skills at the beginning of upper secondary school since they manage to "get away" with their informal language. As the education becomes more formal, the students perceive English class to be as boring and difficult as Swedish class. This might have to do with the students reaching a more advanced level in their language learning. At this point, the students might feel that what is being taught is of no use in their everyday life, and according to Skolinspektionen (2016), the education should relate to the students' life experiences in order for the students to perceive it as meaningful and interesting.

TTD1 describes that he sees this problem in his classroom as well:

If I am to compare English and history, which is my other subject, I experience students being more interested in English, especially in English 5. Maybe this is because they use English more in their spare time. However, when we analyze different types of literature and go deeper into topics, they do not find it as interesting as they usually do (TTD1, my translation).

Based on these three respondents' (TASD1, TASD2 and TTD1's) experiences, the ASD students are more interested in English class than in Swedish class or history class, at least while they are allowed to use English in its informal form. Based on Skolinspektionen's (2016) findings, this could be the case since the students use English in its informal form during their spare time, e.g. when they are playing videogames, and therefore may perceive the education as being relevant to their everyday life.

4.3   English teachers' experiences of using social interaction to help students develop their communicative skills

The majority of the teachers preferred using social interaction in order to help the students develop their communicative skills, no matter whether the students were TD or ASD students. Even though they were aware of their ASD students' limited abilities for interaction and communication, they did not neglect social interaction in their teaching. The respondents (TASD2, TTD2 and TTD1) considered the use of social interaction the prominent approach when creating genuine verbal communication that may occur in everyday situations. Between reception, production, and interaction, TTD2 is of the opinion that he probably focuses the most on interaction:

First and foremost, interaction. Even though I experience it to be the most difficult thing to work with, I am still interested in students developing their communicative skills through genuine interaction, as opposed to listening to various conversations in their workbooks […]. It is

difficult since reading comprehension only requires a book and listening comprehension requires an audio file. Interaction, on the other hand, demands one to come up with questions that motivate the students and questions that they are able to discuss. Meanwhile, many students suffer from performance anxiety and second language anxiety (TTD2, my translation).

TTD1 says that the benefit of using social interaction in education is that one gets as close to a genuine replication of real conversations as possible. Throughout his teaching, TTD1 prefers to speak English so that the students feel comfortable using the language and interacting with eachother, but also with other people if necessary. He states that:

I make a point to always speak English, answer questions in English and to include some sort of discussion every lesson, not necessarily tied to an assignment, but to get them to interact and talk about things they are comfortable with. Even though it is not always easy, especially for students with Asperger syndrome and High Functioning ASD (TTD1, my translation).

Since TTD1 uses interaction to replicate real conversations and to make students discuss various topics they are familiar with in English, it can be argued that he prioritizes social interaction because it is not only beneficial in school, but also outside of school and in the future, which is TASD2's objective as well.

He answered that:

It entirely depends on what the communicative skill is going to be used for in the future. However, listening, talking and interacting with other people are probably the most common things one does with English. In an everyday situation, I believe that understanding and having the ability to speak English to other people are the most important skills. Therefore, I tend to primarily focus on these (TASD2, my translation).

Three out of four respondents (TASD2, TTD2 and TTD1) preferred, and tended to put extra focus on, interaction when helping the students to develop their communicative skills. The two main reasons for this were, firstly, that social interaction was considered an outstanding approach to improve students' communicative skill, primarily since it makes it possible for the students to replicate real conversations. Secondly, conversing in English is probably what people do the most with the language. So according to the teachers, social interaction not only helps to develop their students' communicative skills, it also prepares them for current and future everyday situations where the ability to speak and interact in English is necessary and therefore should not be neglected in the education.

Nonetheless, social interaction was regarded the most difficult approach through which to develop

the students' communicative skills by TTD2, TTD1 and TASD1. TTD1 explicitly mentioned that the use of social interactions in a classroom with ASD students at times is a complicated task. Also, TASD1 shares his experience that many of the students he teaches find it difficult to interact socially with their classmates. The primary reason for this their difficulties in relating to other people, but they also often have language difficulties. Remarkably, even TTD2 who at the moment does not teach any students with High Functioning ASD, found interaction to be the most difficult method to work with, primarily since it requires a lot of conceptualization and preparatory work. In addition, according to TTD2 social interaction is difficult to work with because he experiences that many of the students suffer from performance anxiety and second language anxiety. However, since they all strived to prepare their students for everyday situations by having them become more comfortable using English for communication, interaction was considered an eminent approach to improve students' communicative skills. Despite its difficulties, it could therefore not to be neglected.

4.4   Teachers' attempts to create fair assessment and an equitable education

Some of the respondents experience that creating an equitable education is a difficult task since the definition of the term is so vague, but also since there are no defined approaches to measuring this. As mentioned earlier, the general definition of equitability in a school environment is that the education provides equitable access and quality of teaching to every student, while the school compensates and gives support for adverse circumstances that might occur (Lindblom, 2015). Despite this, many teachers had different ideas as to what the actual definition of equitability was. Nevertheless, they all agreed that they have had to adapt their education to each individual student in order to accomplish this task. This was something that the teachers of students with ASD, when it became necessary, experienced as being easy, primarily since they taught fewer students and therefore had more time for individual adaptation at their disposal.

TASD1 mentions that:

> Equitability is very interesting, I here relate it to some form of fairness in e.g. assessment and that there is equability in this. I have worked as a coordinator at another upper secondary school in central Sweden that had many overachieving students. There I experienced that the teaching staff regarded fairness and equality as everyone receiving the same information and test approximately at the same moment, same time and same location, and that is when they considered it to be fair and that the assessment also was fair. I do not believe in this, because it does not consider the individual's needs, which I believe is important in order to achieve equitable education. For example, "one cannot make a blind person read a regular book". It

becomes unfair to let two students read the same books if one of them is blind. This will of course result in the individual who is able to read having a greater basis of judgment, the other student only sits there. So equability for me in the assessments and how to achieve this? Through conversations with colleagues and to make it fair, one has to individualize with clear connection to the policy documents (TASD1, my translation).

TASD1 mentions that the most important factor for a teacher to be able to create an equitable education is to consider each individual's needs, which is in line with what the school law states, that "teaching should be adapted to each pupil's circumstances and needs" (Skolverket, 2011, p.5). Even though this is something that every teacher in the nation has to relate to, the task is easier outlined than achieved, primarily since social relations makes it close to impossible to measure whether an education is equitable or not (Lindblom, 2015). TTD1 expresses that:

I would say that equitability and creating an equitable education is a difficult task. I believe that this is something one constantly has to work with since every student is different. Meanwhile, I think that it is difficult to measure whether the education one pursues is equitable for every student. Is equitability that everyone has been given the same opportunities and information, or that each student has received an education adapted to his or her ability? I believe that both of these are a part of an equitable education (TTD1, my translation).

Not only is it a difficult task, it is also very time consuming, which many respondents also mention as a problem. For example, TTD1 further describes that:

I have a handful of students with High Functioning ASD, and they affect my profession positively as I have to adapt to the situation. I always have to, and try to come up with new strategies and ways of explaining assignments. It will make me a better teacher in the long run, even if it is challenging when it happens since I have to consider their disorder, which at the same time is time-consuming (TTD1, my translation).

TASD2 and TTD2 also highlight the same problem. Even though TASD2 does not experience the problem first hand given that he currently has fewer students and therefore more time to adapt to each individual student, he explains that:

I believe it is very difficult for an English teacher at a national program with 35 students, I am not sure. For me, where I work, of course! In comparison to them, we have much more time on our hands so we should be able to manage the task, but I believe it is very challenging for the others (TASD2, my translation).

Full time employed teachers work the same number of hours, 45 hours a week. However, since the ASD students' classrooms comprise fewer students (approximately 8), the teacher is able to give each individual the time he or she requires, which is something teachers of TD students are not able to do to the same extent. TTD2 for example mentions that, "it is very time consuming and sometimes challenging to find appropriate materials. I do, however, believe that it is well worth it" (TTD2, my translation). Further, TTD1 expresses that:

> It [the adaption] causes a lot of complications. One is limited by both time and creativity. For example, it can be challenging to come up with new ways of explaining the same assignment, problem, or to adapt and provide each individual student with the tools he or she needs to succeed. I am hoping that this will come with experience! (TTD1, my translation).

Many of the respondents highlighted time as an important factor in order for them to be able to adapt their education to the individual student. In addition, some of the respondents experience it to be challenging to find appropriate material and to come up with new methods to explain things. In other words, the respondents regarded time and creativity to be important factors to possess in order to achieve this duty. What this does to the students' language acquisition will be discussed further in the next section (see 4.5).

4.5   The need to show additional consideration when educating students with ASD

All of the respondents experience that they have to be more flexible when teaching students with ASD, than when teaching TD students, who tend to allow them to "stick to their plan". This is something that they are not always able to do when teaching students with High Functioning ASD, since the teachers have to consider the ASD students' disorder and daily conditions when planning and delivering the lessons. TTD2 describes his experiences of working with ASD students by stating:

> The few times I worked with students with High Functioning ASD, I tried to construct my teaching by starting from the students, their needs, and interests. My primary concern was to help them develop an intrinsic motivation, which, I believe, is best found by allowing them to be a part of the planning of the teaching (TTD2, my translation).

What TTD2 says here is relevant to the previous section where I discussed teachers' ability to adapt the education to each individual student and that this might have an impact on the students' language acquisition. By adapting the education to the students and involving them in the planning process, the teacher will promote a positive L2 learning experience and thereby be able to help his students become

more intrinsically motivated to acquire a second language. This would probably be the ultimate goal for every teacher and not just TTD2 since students who are intrinsically motivated tend to focus on the activity and his or her personal interests to learn a second language (Dörnyei & Ushioda, 2009). Even though TTD2 does not teach ASD students as frequently as the other respondents, TTD1 shared a similar perspective, as outlined in the previous section (see 4.4), where he mentioned that the ASD students' disorder resulted in constantly having to adapt to the situation, and come up with new strategies to explain the assignments, which in turn would eventually make him a better teacher.

From a more experienced teacher's perspective, working with ASD students has provided the teachers with an ability to read their students and develop their perceptiveness. Because of this, the teachers are able to make quick adjustments and adaptations that suit their students' needs. TASD1 mentions that:

> When I worked on a national program, I had a clear mindset on what to do before entering the classroom, I had a lesson plan that just had to be executed. Here […], I can sometimes enter a classroom with my aim and my lesson plan, but the climate in the classroom does not allow me to carry it out. It can be conversations or that I come across other issues that interrupt my plan. Therefore, the ability to be receptive and understand the students is something that I have been able to improve here. Today I would not be a teacher who enters a classroom and carries out a lecture without considering the students in front of me (TASD1, my translation).

Furthermore, on the same matter, TASD2 expresses that he uses another teaching approach if his primary educational style does not work. Since he usually uses a lot of discussions and social interaction in his classroom regardless of his students' difficulties, it sometimes, despite his good relationship with his students, can be an issue for his ASD students. Here he describes a situation that he once had with a former student:

> I worked on English literary history with a class where I had a student who could not relate [to the material], so I had to come up with something of my own. In this case the student got to work on themes instead and to shift the focus to e.g. horror. If a student is not able to cope with the slightly "freer" education that I pursue, where we discuss a lot and take notes, I have another 'binder system' that I implement where it is needed. This system allows the student to complete and check off the assignments. However, I see great value in keeping the group together and having them work with each other since their social skills benefit more this way. In my opinion, the group loses more by having 7 individuals that work on different assignments (TASD2, my translation).

The respondents appear to be making more allowances to their ASD students than to their TS students. Also, in a classroom consisting of TD students, the respondents experience that they are able to stay with the lesson plan and making the students adapt to their teaching. This stands in contrast to a classroom consisting of ASD students only, where the respondents feel that they have to consider the students' disorders and daily conditions to a greater extent. The more experienced teachers TASD1 and TASD2 explicitly mention that working with ASD students has developed their perceptiveness and ability to understand their students. Based on the respondents' remarks, in a classroom consisting of ASD students, there is a lot of focus on the individual and on the activity in terms of allowing students to have an impact on the lesson plans and the teaching. As a result, this will make it easier for the students to develop an intrinsic motivation (Dörnyei and Ushioda, 2009).

4.6   ASD students perform better in English than in Swedish

According to the experience of the only two respondents who teach both Swedish and English for ASD students (TASD1 and TASD2), the students are performing better in their L2, English, than in their L1, Swedish. As mentioned in section 4.2, students in upper secondary school with High Functioning ASD perform better in English. They perceive it to be more fun than Swedish, at least as long as it is informal and "free". However, they find English being as boring as Swedish the more formal it becomes. As it becomes formal, it appears to become more difficult for the students, who thus lose interest and perform worse. TASD1 explains the students' approach to Swedish and English in the following way:

> I often get the impression that the students who come to upper secondary school have a feeling that English [as a subject] is much more fun than Swedish, that is the first thing, which gives me as a teacher a greater opportunity. Many of the students perceive Swedish class to contain much more, there is grammar, there are formalities, and it has to be argumentative etc. Meanwhile, we have these students that I mentioned earlier, that are good when communicating in English during informal settings, even though it is not always grammatically correct, nor regulated by formalities, they manage to make the communication work. Therefore, I believe that these students both enjoy and perform better in English than in Swedish (TASD1, my translation).

Interestingly TASD2 shares a similar experience on the matter, he mentions that:

> I believe that at some level, they are weaker in Swedish than in English, which is kind of paradoxical, but they touch upon deeper aspects in Swedish class than in English. I need to discuss more difficult things in Swedish than I do in English (TASD2, my translation).

Although a lot of this has been mentioned in a previous section (see 4.2), the purpose of this segment is to highlight the interesting notion that the ASD students, according to their teachers, perform better in their L2 than their L1, so that it can be investigated in future studies. What makes this hypothesis extra interesting is that the two respondents who are able to make these claims experience the same thing.

5. Discussion of Results

First and foremost, three out of four respondents (TASD2, TTD2 and TTD1 (see table 1)) preferred using social interaction when trying to help students develop their communicative skills, primarily since they regard it as the best way to recreate genuine conversation that reflects everyday situations. Nevertheless, they, for various reasons, also experienced it to be the most difficult approach to use in their teaching. Teachers of students with ASD estimate their students to have better communicative skills when using informal rather than formal language. Notwithstanding this, and not surprisingly, TASD1 and TASD2 find their students struggling to relate to other people, which have a negative impact on their ability to interact with other people as the conversations become challenging and stiff. In connection to prior research, the reason as to why ASD students struggle to interact with other people is, as mentioned in section 2.1, because of their lack of ToM (Foudon et al., 2008), which *inter alia* has a negative impact on their ability to perceive other people's viewpoints (Callesen, Cour & Christensen, 2010).

Furthermore, based on these self-reported results, the formality of the language has a negative impact on the ASD students' motivation of learning English as the learning of English appears to become difficult and boring. Perhaps the students are more motivated to learn a second language while they find it useful and relevant to their everyday life. However, since they are already able to communicate with their peers on the Internet, for example, they might not be as intrinsically motivated to improve their skills in formal English since they do not see the relevance of this. Although the teachers find it difficult to use, they do not neglect it in their teaching, first and foremost because of the proven benefits it has for the students' entire future and L2 acquisition (Wire, 2005), as mentioned in section 2.2. In other words, a substitute approach is not needed nor used by these respondents. Instead, the majority of the interviewees put time and effort into building good relationships with their students. As a result, they were able to challenge their students without any major repercussions, and were able to interact socially, in a similar manner, as they were used to in TD students' classrooms. In other words, they did not have to adapt the teachings to the group or make use of the exceptions agreement on a regular basis.

However, even though the respondents did not always find it necessary to adapt the education when using social interaction exercises, the teachers of students with ASD, TASD1 and TASD2, found it easy to do so when a situation required them to do so. The primary reason as to why they regard the task to be

easily manageable is that they have fewer students and more time available, which gives them better opportunities and allows them to plan and execute their teaching, taking the individual student into account. TTD1 and TTD2 on the other hand do not have the same conditions to adapt their education to the individual student when necessary. However, by providing the students with a range of topics or questions to discuss when using social interaction exercises, the teacher might be able to stimulate and motivate each student at some level.

Nevertheless, all of the respondents experienced the task of creating an equitable education to be difficult since the definition is ambiguous, which is more or less in line with prior research (see 2.4). However, what Lindblom (2015) states is that the definition of equitability in itself is not ambiguous as claimed by the respondents, but rather that the implementation of the concept in a school environment is complex. Because of various factors, such as social relationships, equitability in school cannot be measured, which might be what has lead to this uncertainty of the definition.

6. Conclusion and outlook

As discussed above (see section 1), each student functions differently and because of this, the Swedish National Agency for Education has decided that every education in the country has to be fair and equitable. This creates a challenge for teachers of English when it comes to students with ASD since this neuropsychiatric disability amongst other things affects these individuals' ability for social interaction. The challenge occurs since English education in upper secondary school aims to help students develop their communicative skills, which is also subject to assessment. At the same time, various studies, such as Hamers and Blanc (2000), have promoted social interaction as one of the best approaches to develop students' communicative skills. What this study found is that, in spite of the fact that students with ASD find it difficult to interact socially with other classmates, the respondents do not neglect social interaction in their education. For instance, TASD2 believes that the students lose more than they gain by neglecting social interaction. In his opinion, by working together and interacting with each other the students improve their communicative skills more. Instead of focusing on adapting their education, the teachers take on the task and do what is necessary to help the students develop their communicative skills. Three out of four respondents highlighted the importance of building good relationships with the students. That way they are able to challenge them and use targeted social interaction in their education. For these students this means that they are able to receive a somewhat fair and equitable education in spite of their disorder. Further, since TASD1 and TASD2 have fewer students in the classroom, they are not only able to build close relationships with their students, they are also able to put extra time on social interaction and thereby help the students develop their communicative skills. This gives the students better conditions to receive a more equitable education and a fairer grade in the English courses and

thereby hopefully achieve success in school. However, even though smaller classes seem to be the key to a successful and equitable education, it also becomes a matter of economics. Especially since managing all of this would require more classrooms and more teachers. Consequently, TTD1 and TTD2 do not have the same advantages as TASD1 and TASD2 to create an equitable education. Their experience is that this is a time-consuming task, and since their time is limited, they find it challenging to achieve this.

For future studies, it would be interesting to, through a larger quantitative study, investigate what ASD students' experiences of social interaction and L2 learning are, and how fair they experience their education to be. This type of study would make it possible to make general claims, which I unfortunately was unable to do. In addition, the study suggests that students with ASD perform better in English class than in Swedish class since it is not as formal and in-depth. However, the study also suggests that the more comprehensive English gets, the less popular it gets among the ASD students, which thereby has a negative impact on their motivation to develop their English proficiency. Therefore, it would be interesting to investigate how a classroom characterized by more in-depth and higher-level English affects learners' motivation.

References

Autism & Aspergerförbundet. (2017). Autism. Retrieved 2017-04-01 from

http://www.autism.se/autism

Bardis, P.D. (1979). Social Interaction and social processes. *Social Science*, 54,

147-167. Retrieved 2017-05-18 from http://www.jstor.org/stable/41886414.

Bryman, A. (2012). *Social research methods 4ᵗʰ Edition*. New York: Oxford University Press.

Callesen, K., Cour, E.L., & Christensen, E. (2010). *Theory of Mind – vad är det egentligen för något?*.
Stockholm: Pedagogiskt Perspektiv AB.

Çimen, L.K. (2016). A study on the prediction of the teaching profession attitudes by communication
skills and professional motivation. *Journal of Education and Training Studies*, 4. 21-
38. Doi: 10.11114/jets.v4i11.1842.

Dörnyei, Z., & Ushioda, E. (2009). *Motivation, Language Identity and the L2 Self*. Buffalo, NY :
Multilingual Matters.

Foudon, N., Reboul, A., & Manificat, S. (2007). Language acquisition in autistic children: A
longitudinal study. *CamLing 2007: Proceedings of the Fifth University of Cambridge
Postgraduate Conference in Language Research*, 72-79. Cambridge: Cambridge
Institute of Language Research. Retrieved 2018-01-26 from
http://www.ling.cam.ac.uk/camling/

Foudon, N., Reboul, A., & Manificat, S. (2008). Language acquisition in autistic children: The role of
joint attention. *Cahiers*, 14(1), 45-65. Retrieved 2018-01-26 from
http://www.afls.net/cahiers/14.1/foudon.pdf

Frith, U., & Happé, F. (1994). Language and communication in autistic disorders.
Philosophical Transactions: Biological Sciences, 346, 97-104.
Doi:10.1098/rstb.1994.0133.

Gonyea, R. M. (2005), Self-reported data in institutional research: Review and recommendations. *New
Directions for Institutional Research*, 127, 73–89. doi:10.1002/ir.156

Hamers, J.F., & Blanc, M. H. A. (2000). *Bilinguality and bilingualism*. New York:
Cambridge University Press.

Hay, I., & Winn, S. (2012). High Functioning Autism Spectrum
    Disorder: A challenge to secondary school educators and the
    students with the condition. Retrieved 2018-01-26 from
    http://files.eric.ed.gov/fulltext/ED542469.pdf

Lindblom, L. (2015, November). Snåriga vägar till likvärdighet. *Pedagogiska*
    magasinet, 4. Retrieved 2018-03-10 from
    http://pedagogiskamagasinet.se/snariga-vagar-till-likvardighet/

Longman Dictionary of Contemporary English Unabridged. Retrieved 2018-02-28 from
    ldoceonline.com website https://www.ldoceonline.com/dictionary/autism

Muho, A., & Kurani, A. (2011). The role of interaction in second language acquisition. *European*
    Scientific Journal, 16, 44-54. ISSN: 1857-7431

Newschaffer, C.J., Croen, L.A., Daniels, J., Giarelli, E., Grether, J.K., Levy, S.E., Mandell, D.S., Miller,
    L.A., Pinto-Martin, J., Reaven, J., Reynolds, A.M., Rice, C.E., Schendel, D., &
    Windham, G.C. (2007). The epidemiology of autism spectrum disorders. *Annual*
    Review of Public Health, 28, 235-258. Doi:
    10.1146/annurev.publhealth.28.021406.144007.

Sandbank, M., & Yoder, P. (2016). The association between parental mean length of utterance and
    language outcomes in children with disabilities: A correlational meta-analysis.
    American Journal of Speech-Language Pathology, 25, 240-251.
    Doi:10.1044/2015_AJSLP-15-0003

Saville-Troike, M. (2006). *Introducing Second Language Acquisition*. New York: Cambridge University
    Press

SFS 2010:800. *Skollag*. Stockholm: Utbildningsdepartementet.

Skolinspektionen. (2016). *Tematisk analys: Utmaningar i undervisningen*. Retrieved 2017-06-21 from
    https://www.skolinspektionen.se/globalassets/publikationssok/analys/2016/analys
    utmaningar-i-undervisningen.pdf

Skolverket. (2011). *Curriculum for the upper secondary school.* Stockholm: Skolverket.

Skolverket. (2017). *Elever med funktionsnedsättning och betyg*. Retrieved 2017-04-01 from
    https://www.skolverket.se/bedomning/betyg/elever-med-funktionsnedsattning

Tooby, J., & Cosmides, L. (1990). On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality*. 58. 17-67. Retrieved 2018-01-26 from http://www.cep.ucsb.edu/papers/jpersonality.pdf

Trost, J. (2010). *Kvalitativa intervjuer*. Lund: Studentlitteratur AB

Wire, V. (2005). Autistic spectrum disorders and learning foreign languages. *The British Journal of Learning Support, 20*. Retrieved 2018-01-26 from http://www.languageswithoutlimits.co.uk/resources/SfLAutism.pdf

Zeedyk, S.M., Tipton, L.A., & Blacher, J. (2016). Educational supports for high functioning youth with ASD: The postsecondary pathway to college. *Sage Journals*, 31. 37-48. Doi: 10.1177/1088357614525435

Appendix 1

Questions for the interview translated to English:

1. In what way do you as an English teacher aim at developing: *communicative skills* **(reception, production and interaction)** in your second language teaching?

   Across reception, production, and interaction, do you have one of these that you estimate yourself to be focusing on more?

   If so, what do you believe the reason for that is? Please elaborate.

   -Do you find any of these categories more challenging to work with than the others?

   Have you experienced situations where one of these is more suitable than the others, in terms of developing the students' communicative skills?

2. Have you taught any students with High Functioning autism/Asperger since you became a teacher?

   If yes, in what way has this this affected your profession?

   What is your experience when it comes to teaching communicative skills to TD (Typical development) students in comparison to ASD (Autism Spectrum Disorder) students? Do you find it to be easier or more difficult to do so, and why do you think this may be the case?

   When comparing between English and the other subject(s) you teach, what are the major differences you have experienced related to their performance?

   If not, would you like to? For what reasons?

3. What is your experience when it comes to developing the students' communicative skills and creating an equitable education for every student?

   In your opinion, is it possible to achieve this goal of a fair and equitable education?

   If yes, what advice would you like to give to teachers that are just about to graduate and maybe do not have the experiences to do so yet?

   If no, for what reasons? Please elaborate.

   In terms of adapting your education to every individual student, does it cause any complications? And if so, which ones?

Appendix 2

The interview questions in Swedish:

1. På vilket sätt strävar du som engelsklärare att utveckla *kommunikativa förmågor* **(reception, produktion och interaktion)** i din andraspråks undervisning?

   Mellan reception, produktion och interaktion, har du någon av dessa som du bedömer dig själv att fokusera mer på?

   Om så är fallet, vad tror du att det beror på? Utveckla gärna.

   Finner du någon av dessa kategorier vara mer utmanande att arbeta med än någon annan?

   Har du upplevt situationer där någon av dessa är mer lämplig än någon annan, sett till att utveckla elevernas kommunikativa förmågor?

2. Har du undervisat några elever med hög fungerande autism/ asperger sedan du blev lärare?

   Om ja, på vilket sätt har detta påverkat ditt yrke?

   Vad har du för erfarenheter när det kommer till att undervisa kommunikativa förmågor till typiskt utvecklad elever i jämförelse med ASD elever? Anser du att det är lättare eller svårare att göra detta och varför är så fallet?

   När du jämför mellan engelska och det andra ämnet/ämnena som du undervisar i, vad är de största skillnaderna du upplever sett till deras prestationer?

   Om inte, skulle du vilja göra detta, av vilka anledningar?

3. Vad är den erfarenhet när det kommer till att utveckla elevers kommunikativa förmågor samt att skapa en likvärdig undervisning för varje elev?

   Enligt din åsikt, är det möjligt att detta mål av en rättvis och likvärdig undervisning?

   Om ja, vilka råd skulle du vilja ge lärare som snart tar examen och kanske inte har erfarenheterna som krävs för att göra detta ännu?

   Om inte, av vilka anledningar? Utveckla gärna.

   Sett till att anpassa din undervisning till varje individuella elev, skapar detta några komplikationer? Om så är fallet, vad för några?