



Accommodating Neurodivergent Pupils in English as a Foreign Language Classes: What are Czech Teachers' Needs?

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Abstract

The paper aims to present partial findings of larger-scale research on autism spectrum disorder (ASD) learners previously diagnosed with Asperger's syndrome according to the Diagnostic and Statistical Manual of Mental Disorders/DSM-IV-TR (4th ed., text rev., 2000) diagnostic criteria and their classroom experience in English as a foreign language (EFL) classes in the Czech Republic conducted at the Department of English Language and Literature, Faculty of Education, Masaryk University. Research on foreign language learning (FLL) of ASD pupils in the Czech Republic has been scarce, with mere solitary attempts at the level of bachelor's or master's thesis and none conducted on ASD learners' English teachers. This research attempts to find out how well-prepared and supported Czech EFL teachers feel to accommodate neurodivergent pupils in their classes and their self-reported needs so that they can knowledgeably provide the adjustments and accommodations in the classroom environment and the teaching process for their ASD pupils in regular English classrooms. The whole research sample consisted of ten ASD learners of English from lower- and upper-secondary schools, their parents and teachers of English and ten ASD adults. Purposive sampling (Silverman, 2013) was employed. Two methods of data collection (semi-structured interviews and qualitative surveys) were used to collect the data, and these were further analysed using thematic analysis (Braun & Clarke, 2006) with the help of ATLAS.ti 8.0 software. This paper presents a part of the findings from the ten teachers that are important for ELF teachers, school directors and policymakers when making decisions about the accommodation of neurodivergent pupils in English classes both in everyday classroom practice and at the policy-making level.

Keywords: ASD learners, EFL, ELT, Asperger's syndrome, neurodivergence, teachers' needs

1. Introduction

Although autism spectrum disorder (ASD) rates statistics differ across countries, ASD qualifies worldwide as a group of rapidly growing neurodevelopmental disorders (APA, 2022), with one in thirty-six eight-year-old children diagnosed with ASD in the USA in 2020 (Maenner, Warren, Williams et al., 2023) according to estimates from CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network. In the Czech Republic (with a population of 10,5 million), the prevalence of autism is estimated between 1.5 and 2% (Nautis, 2023), with evidence showing that ASD is more commonly diagnosed in boys than girls (ratio 4:1) and girls possibly being underdiagnosed due to the nature of ASD characteristics (Thorová, 2016). In the school year 2021/2022, 4,214 pupils were diagnosed with ASD in the Czech Republic (ÚIV MŠMT ČR).

ASD are characterized by persistent impairments in social interaction, restricted repetitive patterns of behaviours, and interests or activities that can cause difficulties in social interaction, communication, and participation in daily activities (Maenner, Warren, Williams et al., 2023; APA, 2022). All these characteristics may influence a child's first language acquisition and their foreign language (FL) learning in or outside the class in many ways. The question is how well-prepared FL teachers are to accommodate ASD pupils in their FL classes, which is the focus of this paper. ASD pupils may need additional support and guidance in their FL classes; however, as our research shows, the opposite is also true. Our research aimed to investigate the challenges ASD pupils face when participating in English language classes at lower- and upper-secondary schools in the Czech Republic and how they influence classroom practices by interviewing and surveying ASD pupils (n=10), their parents (n=9), teachers (n=10), and ASD adults (n=10). This paper presents partial research findings focused on the teachers' perspectives on teaching their ASD pupils. As Barnard et al. (2002, p. 20) state, it is





"subtlety of understanding that teachers cannot be expected to possess without detailed training in autism, and it is the lack of this training that will do most to ensure the failure" (Barnard et al., 2002, p. 20). Do the teachers have the recommended training?

Nowadays, standardized criteria to help diagnose ASD are provided by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-V-TR), published by the American Psychiatric Association in 2022 (APA, 2022). However, all the ASD research participants were diagnosed with Asperger's syndrome in line with DSM-IV-TR (APA, 2000) and *International Statistical Classification of Diseases and Related Health Problems (10th revision)*/ICD-10 (2016) that was substituted by ICD-11 (2019) only recently in 2022 and the changes are still in progress in the Czech Republic. This causes terminological problems since, according to DSM-V (APA, 2013), Asperger's disorder should be given the diagnosis of autism spectrum disorder with a further specification of whether the ASD diagnosis includes accompanying intellectual and/or accompanying language impairment and whether it is associated with a known medical or genetic condition (such as Rett's syndrome) or environmental factor or with another neurodevelopmental, mental, or behavioural disorder that becomes specifiers of the ASD disorder (APA, 2013).

None of the research participants were aware of these changes. They continue to use the DSM-IV (APA, 2013) terminology; however, it needs to be clarified that ASD in this text only refers to individuals previously diagnosed with Asperger's syndrome.

2. Review of Research

The paper draws on extensive research on topics ranging from ASD diagnostics to research in many narrower fields of study, including linguistics. Topics interrelated with foreign language learning are first language acquisition, first language learning, second language acquisition, second language learning and bilingualism among children diagnosed with ASD, all of which are well-established research fields (e.g. Myles et al., 2003; Tager-Flusberg, 2004; Eigsti et al., 2011; Hani, Gonzalez-Barrero & Nadig, 2013; Gonzalez-Barrero & Nadig, 2016 and many others), with bilingualism having been a controversial topic because of the formerly common practice of advising bilingual parents of ASD children to speak only one language based on the assumptions that dual language exposer hinders their language development (Lim et al., 2018; de Oliveira, 2015). Empirical evidence, however, suggests bilingual exposure has no impact on ASD children's language skills in their first language, their cognitive functioning or their affective and social development (Petersen et al., 2012; Ohashi et al., 2012; de Oliveira, 2015). Since, in the context of the Czech Republic, ASD pupils learn English as a foreign language, not a second language, the review of research was narrowed down to this very topic with the conclusion that larger-scale research is scarce and so is quantitative research. Many empirical studies located in WoS, Scopus, and Ebsco and found outside of these databased in peer-reviewed journals present case studies with few, often just one, participant and their conclusions are narrowed down to recommending visualization, a buddy programme, team-teaching, and ICT in ASD learners' FLL (see e.g. Padmadewi & Artini, 2017; Ghedeir Brahim, 2022).

One of the most important studies focusing on classroom observations of FL classes with pupils diagnosed with AS by expert teachers was the one published by Wire (2005), who sees a lot of potential in ASD learners' FLL for their communication development. There have been three studies that are the closest to our research interest. Caldwell-Harris (2022) analysed 169 autism forum posts discussing ASD individuals' FLL learning experience, with some of the posts showing signs of savantism and polyglotism. Eight themes were identified in the posts: 1) reading and writing considered strengths, 2) listening being difficult, especially with background noise, 3) speaking being difficult due to demands of immediacy, 4) languages being a special interest, and 5) often self-taught, 6) interest in language structure, 7) advantages and disadvantages of ASD for language learning, 8) multiple FL studied.

A follow-up study is a journal article on ASD adults discussing their experiences of FLL in online discussion forums published by Caldwell-Harris et al. (2023) as a pre-print that was, however, withdrawn by the authors and is currently undergoing a peer-review, which is the reason it is not further discussed in this study. Angulo-Jiménez, Bonilla-López & Rojas-Ramírez (2024) seem to have designed their research similarly, having conducted a deductive thematic analysis of 14 blog posts written by self-identified ASD bloggers on FLL, whose mother tongue was English and who had learned Spanish or French as a FL. The authors state that the positive effects of autism on FLL prevailed in the sample.

It seems there has been no previous research published on ASD individuals and their FLL in which they would have been directly asked about their experience, which is why the main aim of our





research was investigating the EFL classroom experience of ASD learners and their parents and teachers.

3. Methodology

3.1 Research Questions

The questions the research participants were asked focused on aspects of their experience related to both the classroom environment and lessons in general, as well as on the specifics of EFL lessons to find out what type of support (if any) ASD learners, their parents, and their teachers perceived as needed in their EFL lessons and what the reasons were.

This paper, however, presents only a part of the data and focuses on the teachers' experience(s) and views on teaching EFL to ASD learners and especially their perception of their preparedness for the task and their needs with the research questions asked being the following ones:

- 1) What ASD characteristics and/or obstacles that prevent ASD pupils from learning English effectively are the most frequently reported by teachers?
- 2) How well-prepared and supported do teachers feel when teaching ASD pupils?
- 3) How much extra time do teachers spend preparing for an EFL lesson with an ASD pupil?

3.2 Research Participants

The respondents and interviewees were representatives of four groups. The first group comprised ten lower- and upper-secondary school ASD pupils and two university ASD students starting their studies (four identified as female, six male). The youngest participant was twelve years old; the oldest one was twenty-one years old. Their English teachers and parents represented the other two groups of research participants. The fourth group included ten ASD adults reflecting on their past English classroom experience at their (mostly) lower- and upper-secondary schools. The focus of this paper, as written above, is narrowed down to the teachers in the sample; however, a description of the overall research design is provided for clarity. All the research participants were assigned a letter (see Table 1). Teacher H refused to participate in the research and was substituted with Teacher K, whose pupil was a twenty-one-year-old adult starting university, for the sample to include ten teachers.

ASD learners		Pupils and students								Adults										
of English	Α	В	С	D	Ε	F	G	Н	- 1	J	K	L	M	Ν	0	Ρ	Q	R	S	Т
ASD learners'	Α	В	С	D	Е		G	-	I	J	-	-	_	_	-	-	-	-	-	-
parents						F2														
ASD learners'	Α	В	С	-	Е	F	G	Н	I	J	K	-	-	-	-	-	-	-	-	_

Table 1. Research participants

The basic data about the teachers (n=10, one identified as male, nine as female) who participated in the research are provided in Table 2. The sample included five lower-secondary school teachers, three upper-secondary school teachers, one teacher working both at a lower- and upper-secondary school and one teacher working at both an upper- and postsecondary school, with three of them being in their thirties, four in their forties, and two in their fifties and with differing years of teaching experience ranging from one year to up to thirty-five years. All the teachers but one (Teacher J) were fully qualified teachers of English as an FL, with Teacher J only having received a bachelor's degree in ELT. Two of them obtained degrees in study programmes other than ELT (Teacher A in business administration and psychotherapy for children and Teacher C in upper-secondary school teacher training specialising in Czech language and literature).





Teacher	Male (M)/ female (F)	Age category	M.A. degree/ M.A. degree in ELT	Years of teaching experience	Full- time (F)/ part- time (P)	Type of school (current)	ASD learner: year of birth/ age/ male (M)/ female (F)/ type of school	Survey (S)/ Interview (I) + length of interview in minutes
A	F	40-49	yes/no	19	F	lower- secondary (8 th grade)	2005/14/F/ lower-secondary (7 th grade)	I (62 min)
В	F	40-49	yes/yes	15	F	lower- secondary (8 th grade)	2005/15/M/ lower-secondary (8 th grade)	S
С	F	30-39	yes/no	1	F	lower- secondary (6 th grade)	2007/12/ M/ lower-secondary (7 th grade)	I (33 min)
E	F	40-49	yes/yes	21	F	secondary and post- secondary school for librarians	2000/20/M/ upper- secondary school/ university (1 st year)	I (44 min)
F	M	30-39	yes/yes	5	Р	lower- secondary 6 th – 9 th grade)	2004/16/M/ upper- secondary school (1 st year)	I (114 min)
G	F	50-59	yes/yes	13	F	lower- secondary (6 th – 9 th grade)	1999/21/ M/ university (2 nd year)	S
Н	F	30-39	yes/yes	16 (1 at upper- secondary school)	F	lower- secondary (6 th – 9 th grade)	2003/17/F/ upper- secondary (2 nd year)	I (48 min)
I	F	30-39	yes/in progres s	13	F	lower- secondary (6 th – 9 th grade)	2005/15/F/ lower-secondary (8 th grade)	I (51 min)
J	F	40-49	no (only B.A. degree) /no (only B.A. degree)	4	F	lower- secondary (6 th – 9 th grade)	2007/13/M/ lower-secondary (6 th grade)	I (48 min)
К	F	50-59	yes/yes	35	F	lower- secondary + upper- secondary	1999/21/F/ university (1 st year)	S

Table 2. Learners' teachers and methods of data collection

3.3 Methods of Data Collection and Analysis

Qualitative research methods were used to investigate the topic and achieve data source and method triangulation (Patton, 1999; Denzin, 2006, 2009, 2012). Method triangulation was achieved by employing two methods of data collection (semi-structured interviews and qualitative surveys). Data source triangulation was achieved by recruiting research participants falling into four groups (see subchapter 3.2). Purposive sampling (Silverman, 2013) was employed with the research participants recruited via a combination of linear snowball sampling (Parker, Scott & Geddes, 2019) and addressing Czech organizations supporting people with ASD and their family members (Paspoint, APLA Prague, Nautis) and via social media platforms. The final sample included 26 interviews and 13 surveys collected over six months from the 1st of April 2020 (when the first pilot interview was conducted) to the 30th of September 2020 (when the last interview was conducted).

This paper focuses on the data from the surveys and interviews with the teachers (see Table 2).





All the interviews were conducted online, recorded with the participants' consent and manually transcribed. The transcription process started at the beginning of 2023 and continued continuously until the end of July 2023. All the interviews and surveys were coded using the respondents' utterances in their mother tongue (Czech) using a combination of inductive and deductive thematic analysis (Braun & Clarke, 2006).

4. Findings

4.1 What ASD Characteristics and/or Obstacles that Prevent ASD Pupils from Learning English Effectively Are the Most Frequently Reported by Teachers?

The teachers were asked about ASD characteristics and outward behaviour of their ASD pupils consistent with the ASD diagnostic criteria (APA, 2022). Although the list is exhaustive, it is important to state that there were many items on the list reported by none or only a few teachers, whose letters are provided in brackets in the list below:

- 1) unwillingness to communicate/talk (A, F, H)
- 2) problems in verbal communication (A, B, F, H, I)
- 3) problems in non-verbal communication (A, E, F, H)
- 4) other problems in social interactions (A, B, C, E, F, H, I, J, K)
- 5) lack of imagination (no teachers)
- 6) sensitivity to auditory sensations and perceptions (A, C, F, K, I yes, but not in English classes)
- 7) sensitivity to visual and spatial sensations and perceptions (none, Teacher A not sure)
- 8) sensitivity to olfactory sensations and perceptions (B, Teacher A not sure)
- 9) sensitivity to haptic and kinaesthetic sensations and perceptions (Teacher A not sure)
- 10) rude/inappropriate behaviour (disturbance) of the classmates (I)
- 11) their inappropriate behaviour (I)
- 12) reduced ability to concentrate (C, H)
- 13) disinterest in learning English (J, Teacher A not sure; F and H in the past but not anymore)
- 14) associated diagnoses and/or learning difficulties (e.g., dyslexia, ADHD) (no teachers)
- 15) anxiety (A, E, F, H, I, J, K)
- 16) problems with transitions between activities (C, F)
- 17) problems starting or stopping an activity (A, C, F)
- 18) the pace of the lesson mostly too slow (C, I)
- 19) the pace of the lesson mostly too fast (A, F)
- 20) reduced intellectual ability (Teacher A reluctant to judge)
- 21) meltdowns (F, H, I)
- 22) shutdowns (no teachers)
- 23) other (B: does not like specific songs and types of games)

Although none of the teachers reported any learning difficulties or associated diagnoses in their pupils, seven ASD pupils (out of ten) and/or their parents claimed the pupils had been diagnosed with either ADHD (Pupil C, Pupil I, Pupil J), dysgraphia (Pupil D) or multiple associated diagnoses – Student G (ADD, hypoactivity, dysgraphia), Pupil H (ADD, anxiety disorder, panic disorder), Adult K (bipolar disorder, OCD), which their individual educational plans (IEP) clearly stated. The fact their teachers were not aware of this fact (and consequently unaware of the ADHD diagnosis being the most frequently associated diagnosis with ASD) was surprising.

The teachers were explicitly asked whether some of their pupils' problems required a teaching assistant (TA) in their ELF classes. Only four teachers (out of ten) reported their pupils needed a TA in class (Teachers B, E, F, and G). The only areas mentioned were the social area (Pupil B, F, and Student G), with Student G needing a TA only for breaks, and the area of communication (Pupil B, Student E, Pupil F), with Student E needing assistance only in the first year of her upper-secondary school studies. None of the teachers mentioned any help had been needed in the cognitive or sensorimotor area. These findings are important since they demonstrate ASD pupils often do not need any or need very little extra assistance in their FL classes.





4.2 How Well-Prepared and Supported Do Teachers Feel When Teaching ASD Pupils?

Based on the thematic analysis, the teachers' answers may be grouped into three categories. Four teachers (C, H, J and K) felt unprepared to teach ASD learners. This may be interconnected with the fact they had taken no or a limited number of further teacher development courses on inclusion, specific learning difficulties, and autism (see Table 3). Teacher K's self-evaluation was consistent with the fact that she did not seem to be aware of her learner's struggles since her answers to questions asked frequently differed from Adult K's responses. Teacher H said she had no theoretical background or experience with any specific learning disabilities (SLD) or learning difficulties in her learners but stressed the need to educate herself on the topic. Teacher C felt unprepared and experienced substantial stress upon receiving her Pupil C's Individual Education Plan (IVP).

The second group consisted of five teachers (A, E, F, G, and I) who felt prepared to teach ASD learners because of their teaching experience but lacked theoretical background in the topic of ASD, although some of them had taken courses on inclusion and SLD (see Table 3). Teacher A's approach to all her learners was driven by differentiation and individualization – terms she did not use but circumscribed, claiming she relied on her instincts and consequently felt prepared. Teacher E took her further development courses many years ago and felt little was known about ASD then. Teacher F said he relied on his experience with ASD pupils and felt comfortable teaching them but lacked theoretical knowledge of ASD. Teacher I kept insisting throughout the interview that she got on well with Pupil I and stressing she was solely drawing on her teaching experience. She was the only respondent in the sample who expressed her negative stance towards inclusion.

The third group of teachers comprised only one teacher (B) who felt prepared theoretically but lacked enough experience in the field.

amount of time	inclusion		specific learning difficulties	ASD	
no time	Teacher C	Teacher H	Teacher C	Teacher A	Teacher H
	Teacher F	Teacher J	Teacher E	Teacher C	Teacher I
	Teacher G		Teacher F	Teacher F	Teacher J
			Teacher J	Teacher G	Teacher K
less than 6 hours	Teacher E		Teacher I	Teacher E	
			Teacher H	Teacher F	
6 – 15 hours	Teacher I		Teacher G	-	
	Teacher K		Teacher K		
16 – 35 hours	-		-	-	
more than 35 hours	Teacher A		Teacher A	-	
	Teacher B		Teacher B		

Table 3. Amount of time spent on further teacher development courses taken by the English teachers on inclusion, specific learning difficulties, and ASD

As to support and feedback on their teaching of the ASD learners from the school management, none of the ten teachers said they had received any feedback on their teaching, with five teachers (A, C, H, J and G) claiming never having received any feedback on their teaching whatsoever. They expressed their views on several types of support they would have welcomed, such as a seminar targeted at language teachers organised by their school (Teacher B), finding good-quality teaching assistants for ASD pupils (Teacher F) and giving teachers more autonomy in their assessment (Teacher F). Teachers C, E and G were not interested in any support at the school management level. Although Teacher E did not feel she needed any support from the school management, she would have been interested in getting acquainted with Student E's parents. She was not the only teacher who had never been in touch with the parents since half of the teachers reported never having talked to them (A, C, E, H, and K), and Teacher G's communication with the pupil's parents was limited to initial discussion of the pupil's problems.

Some teachers claimed to have received feedback mostly from the ASD pupils (Teacher B, K), although in some cases (Teacher K), this strategy did not seem effective since the teachers' answers to most questions differed from Adult K's answers. Some received feedback from their colleagues (Teacher C, I), support from the school psychologist (Teacher J), the pupil's parent (Teacher B, F, I), or their TAs (Teacher E, F, B).

Only one teacher in the sample (Teacher B) felt well-supported by the Special Education Centre (SEC). The others commented on either lack of support (Teacher G), their lack of need for it (Teacher I), or the fact they only received "papers" with limited value from them (Teacher F) and valued the TA's expertise instead (Teacher F).





4.3 How Much Extra Time Do Teachers Spend Preparing for an ELF Lesson with an ASD Pupil?

Four teachers reported they did not need to spend any extra time on preparation for classes with their ASD pupils (Teacher C, F, G, K), with Teacher F stating that preparation time was rather dependent on the nature of the whole class. The rest of the teachers claimed little extra time was required for their preparation, with Teacher B describing she had been thinking a bit more about the classroom activities her ASD pupil did not like and how to substitute them with other activities (which was also the case of Teacher A) stating she spent on her extra preparation about fifteen minutes a week. Teacher E spent a little extra time planning her classroom management and modes of classroom organization, not to exclude Student E from pair work and considerately thought about discussion questions Student E might have opposed discussing. Teacher H spent extra time talking to Pupil H in her office because the pupil was unwilling to speak in her English classes in front of her classmates. Teacher I's pupil was advanced in English, so Teacher I prepared extra materials for her to fit her level, spending an extra fifteen minutes on her preparation for each class.

5. Conclusion

The findings from the ASD pupils' teachers suggest that the nature of their ASD characteristics does not always – in their opinion – require a TA in English classes (in six out of ten cases) or extra substantial time for lesson preparation (in nine out of ten cases). The teachers often claim to rely on their experience in their interactions with and lesson planning for ASD learners. However, it seems some of them would welcome more support from the school management (Teacher B, F), Special Education Centers, and the pupils' parents (Teacher E). In most cases, specialized teacher training for EFL teachers that the teachers lacked seemed desirable and welcomed by the teachers themselves (A, C, E, F, G, I).

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