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Teaching an FL to students with ADHD

Summary

Teaching foreign languages to students with specific learning difficulties or differences (SpLDs) is challenging because these students have highly individualised learning needs, which stem from the complexity and comorbidity of these difficulties. To respond appropriately, teachers need to consider a range of approaches and classroom accommodations to ensure effective foreign language learning. Dyslexia, as the most commonly occurring SpLD, has received a lot of attention in the current literature, but less attention has been given to the challenges presented by Attention Deficit/Hyperactivity Disorder (ADHD), especially for developing skills in a foreign language. This paper outlines potential approaches, including Multisensory Structured Learning, and accommodations that can be applied in teaching a foreign language to students with ADHD in a classroom setting. The focus was given to English as a foreign language.

Keywords: ADHD, EFL, FL classroom

1. INTRODUCTION

A student with *Attention Deficit/Hyperactivity Disorder* (ADHD) is a challenge for every teacher. When a student lacks concentration, is impulsive, and is excessively mobile, it affects both the student's ability to acquire knowledge, and the dynamics of the entire classroom.

Since the current foreign language (FL) methodology emphasises the importance of students' individual differences (Ellis, 2014), it is important that teachers use teaching approaches and set classroom conditions that help students with ADHD increase concentration, and reduce impulsivity and hyperactivity. Without appropriate accommodations, a student with ADHD may struggle to develop skills in an FL and realise their full potential.

The current literature provides a lot of information on ADHD, and how we should work with students with this disorder. However, the pedagogical perspective tends to be general and focuses on one-to-one and small-group instruction. There is much less research on ADHD in the context of learning FLs, and this limits our understanding of how this disorder affects the way that students develop FL skills.

This paper attempts to provide practical information on teaching students with ADHD in a classroom setting. It applies research findings and theoretical considerations regarding the effect of ADHD on the development of skills in English as a foreign language (EFL).

2. INATTENTION, IMPULSIVITY AND HYPERACTIVITY IN FL LEARNING

Many studies (e.g., Kormos, 2000; Morgan-Short et al., 2018) have found that attention plays an important role in second language acquisition (Robinson, 2003), and therefore, it is currently considered an aspect of aptitude in a second language (Wen, Biedroń, & Skehan, 2017). This is because attention is related to short-term memory – the ability to store information, and to working memory – the ability to manipulate this information over a short time. Attention is thus an ability to select one stimulus, to redirect it, to focus on many stimuli, to maintain focus in a situation where there is no stimulus present, and to perform several tasks simultaneously (Alloway, 2015).

The *central executive*, an attentional controller in processing complex short-term visual and verbal information, is also important (Baddeley, 1996). The central

executive allows individuals to inhibit distractions, and so to direct attention to a task with the intention to complete it. In doing this, they avoid irrelevant information, plan, complete the task in a methodological way, and use effective strategies (Wu, 2014).

Weaker working memory and executive control processes may affect how individuals memorise and process verbal and visual information. Consequently, this affects the development of different language skills (Kormos, 2017). Cain and Bignell (2014) found that single-word reading and reading comprehension in the first language may be lower in students with ADHD. These difficulties in the first language may affect reading skills in FL. Reading comprehension tasks in FL at a proficient level require that learners process complex information, requiring a higher level of attention. Some students with ADHD may, therefore, struggle to complete these tasks successfully.

The work of Alloway, Gathercole, and Elliot (2010) and Martinussen and Tannock (2006) suggests that presenting information orally would be more effective when teaching students with ADHD. On the other hand, individuals with ADHD may have difficulty processing verbal material (Cain & Bignell, 2014). Listening comprehension tasks in FL that require students to focus for a long time or select specific information may be difficult for those with lower attention (Kałdonek-Crnjaković, 2018).

Students with ADHD may also struggle with written assignments. Writing skills in FL are less automatic, which means they have a greater effect on working memory (Kormos, 2017). Students with ADHD may make more spelling mistakes (Adi-Japha et al., 2007; Sparks, Humbach, & Javorsky, 2008), and struggle to plan, organise, and proofread their writing. As a result, their written work often lacks coherence and detail (Kałdonek-Crnjaković, 2018).

There are, however, individual differences in the potential difficulties that students with ADHD experience. The cognitive maturity of the student, as well as the co-occurrence with other SpLDs, is always relevant. Sparks et al. (2008) found that the cognitive profile of university students with ADHD was similar to students with other learning difficulties; yet, the students with ADHD were more likely to achieve high scores in foreign language classes (Sparks, Javorsky, & Philips, 2004, 2005). This suggests that adults with ADHD may develop ways to compensate for lower attention (Kałdonek-Crnjaković, 2018). On the other hand, cognitive and behavioural manifestations of ADHD may be environmentally dependent. In a school context,

they may be aggravated by monotonous tasks as students with ADHD cannot sustain attention when they find activities dull and repetitive (Barkley, 2006). Consequently, the student's academic achievement will be affected (Kormos & Smith, 2012).

Hyperactivity and impulsivity will mainly affect production and social interaction in FL in reference to the skills outlined in the Common European Framework Reference for Languages (Council of Europe, 2018), especially at the proficient level, where the student is expected to pay attention to more complex social rules and respond appropriately in accordance with social conventions. Students may struggle to develop socio-pragmatic aspects of speaking and writing skills and develop fluency at the expense of accuracy (Smith, 2015). This can lead to incoherent expressions with irrelevant information and little control over spelling and punctuation (Kałdonek-Crnjaković, 2018).

3. THE PRINCIPLES OF WORKING WITH STUDENTS WITH ADHD

To work effectively with students with ADHD, the teacher first needs to understand how these students create the world around them (Babocká, 2015). Some students may at first seem to be aggressive and asocial (Skibska, 2013), but a teacher who is aware of the underlying causes of ADHD and understands the mind of the student with ADHD will more easily understand a student's behaviour. The personality of the teacher matters too. Ideally, a teacher should be patient, with a positive (Babocká, 2015), and a non-judgemental attitude. They also should be willingly engaged in working with students with ADHD (Pfiffner, Barkley, & DuPaul, 2006).

Behavioural issues may frequently be challenging when working with a student with ADHD, and therefore major classroom interventions include behavioural, academic, social aspects. The behavioural classroom interventions, which have been found most effective, are based on antecedent- and consequent-based strategies, and self-management approaches (DuPaul & Weyandt, 2006).

Antecedent-based strategies, which attempt to prevent unwilling behaviour, include choice-making, modification of the assigned task (e.g., reduction in size or chunking), and active and regular teaching classroom rules. Consequent-based strategies, which are used after a target behaviour failed, include, for example, a verbal reprimand, preferably delivered to the student privately and in a brief, calm, and quiet manner, or removal from the classroom. In addition, the teacher should use token reinforcement in which the student earns reinforcers for meeting behavioural

expectations (e.g., stickers or points). The reinforcers are aggregated, for example, at the end of the day, and exchange for rewards, which can take different forms (for more information see DuPaul & Weyandt, 2006, and Pfiffner et al., 2006). Finally, self-management approaches are employed by the student themself and aim at the self-control of behaviour. Apart from self-monitoring, these approaches may involve self-reinforcement and self-evaluation (DuPaul & Weyandt, 2006, pp. 163–166).

The teacher does not, however, have sole responsibility for managing the behaviour of a student with ADHD. All stakeholders should be involved, including school management, teachers, support staff, other students, and their parents. Fair treatment is crucial in working with students with ADHD, given the oversensitivity that these students often experience. Schools should establish clear rules, which require an established system to respond to the student's needs, independent of context. If this happens, everyone involved knows what is required of the student and the consequences of not meeting those standards. Students with ADHD will be more likely to feel that they are being treated fairly.

The key principle of the whole-school approach is a system of routines for students with ADHD to help them manage their behaviour. This may include a range of visual aids and gestures – for example, traffic lights, stop cards, or a thumbs-up sign (Rief, 2005). Students may also leave the classroom to calm down, or be assigned a space in which they can work on their own.

Fair treatment may be also enforced by establishing clear success criteria for task performance. So-called SMART targets were introduced by Lloyd and Berthelot (1992) and are fundamental in working with students with SpLDs and special educational needs since they make the lesson highly structured (Tod, 1999). These targets are:

- specific (S),
- measurable (M),
- attainable (A),
- realistic (R), and
- time-bound (T).

The effectiveness of SMART targets, however, depends on how well teachers know and understand individual differences, how well they understand the acquisition of literacy, whether they are aware of the effectiveness of different teaching

approaches, and whether they acknowledge the importance of strict monitoring of progress (Tod, 1999).

In light of the principles of self-management approaches (DuPaul & Weyandt, 2006), involving the student in designing SMART targets can help teachers understand the student's individual L2 and behavioural needs better. This will also make the student more aware of their learning needs and more focused on the quality of the work. The result is that behaviour for learning becomes a secondary concern.

Goals designed by the student should be individualised and short-term, for example, "I am going to write three more sentences by the time this work period is over" (Rief, 2005). The goal should be expressed in the first person: this gives the student a greater sense of responsibility and is step-like to set planning for completion of the work. Self-monitoring should be included, in which the student proofreads work before asking the teacher for help. Goal-setting should also refer to behaviour management. In the foreign language setting, an example might be:

> "I am going to do the first three sentences. Then I will check them to see if I have applied the correct tense. Finally, I will ask the teacher to look at my work. I will take my time. I will not hurry."

Timing is crucial when working with students with ADHD (Babocká, 2015; Rief, 2005). Smith (2015) recommends classroom activities should not last longer than ten minutes, and complex activities may need to be broken into shorter, more manageable goals. The teacher should also set a time limit to complete the assigned task, and monitor the student's work at different phases. Timing will nevertheless depend on the individual needs of the student. Setting a specific time may also have a detrimental effect on the quality of the task completion, because some students may be more concerned about completing a task on time than ensuring the quality of the work. For some students, pacing the work would be more effective than setting a deadline to complete the task. For example, if a reading comprehension task contains eight questions, a student with ADHD can attempt the first four, and check the answers with the teacher before attempting the others. The teacher may ask the student to cover the last four questions so he or she can fully concentrate on the first part of the task. As a result, the student will have less material on which to focus, leading to higher levels of concentration, and the teacher can enhance the quality with which the whole task is completed by monitoring at mid-stage.

When success criteria use SMART targets, the teacher can also provide the student with constructive feedback. This should always be part of work with students with ADHD since it connects input with output through selective attention (Long, 1996). As selective attention is weak in students with ADHD, feedback needs frequent enforcement to create a more focused learning setting for students with ADHD.

Managing behaviour for learning for these students requires effort, and so any attempt that the student makes should be positively commented on by the teacher and supported by a constructive remark. The teacher should first acknowledge the effort regardless of its outcome, and then provide an overview of performance pointing out how the student has already met the success criteria for the task, giving specific examples in reference to L2 language use and behaviour for learning. At this point, the teacher can also provide corrective feedback that will make the student aware of the gap between language production and the target-like L2 form (Long, 1996). The corrective feedback should also mention behaviour for learning if issues occurred during task performance. The teacher should discuss the strategies to improve language use and content in the student's work, as well as their behaviour for learning. Feedback to students with ADHD in an FL classroom should, therefore, refer to both L2 production and behaviour for learning (Figure 1).

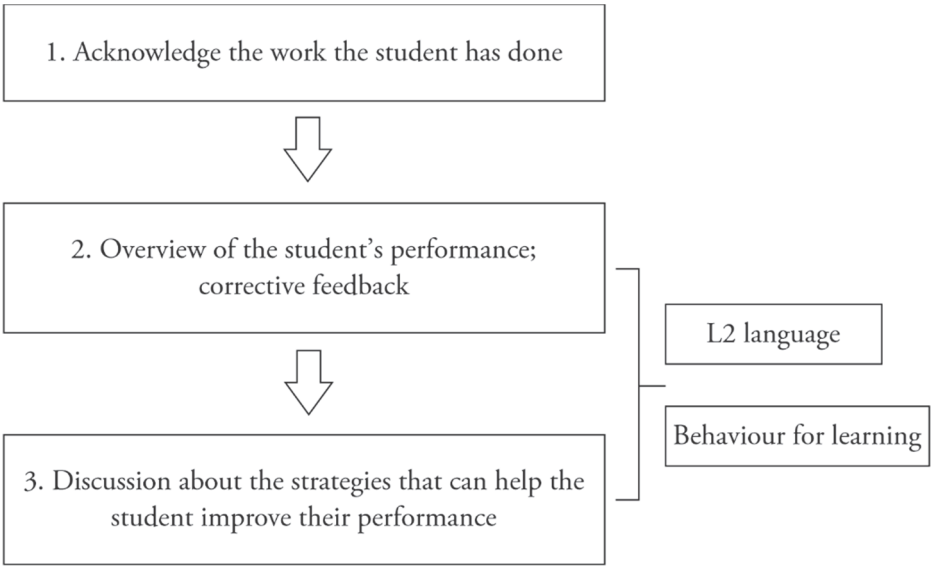

Figure 1. Feedback to students with ADHD in an FL classroom
Slika 1. Shematski prikaz povratne informacije učenicima s ADHD-om

It is also important to create a more focused learning environment by reducing stimuli. It relates to antecedent-based strategies (DuPaul & Weyandt, 2006) and involves classroom management, classroom design, and teaching and learning resources design.

The lesson should be well-organised with clear information to the student about learning goals and outcomes. The teacher should also manage student behaviour to eliminate unnecessary disruptions. Sitting the student with ADHD alone at the front of the class may help control behaviour of both the student and the rest of the class, and the behaviour of the class, but it may also deprive the student of the opportunity to interact with peers, which may inhibit the development of socio-pragmatic skills.

Therefore, the sitting arrangement should be used flexibly, depending on the classroom activity. It might help a student to complete a written task independently and according to targets, if that student sits alone at the front of the class. Once the student has completed the task, he or she can join another student (or a group of students) to check their answers.

Reducing the number of stimuli can also be important when providing instructions or presenting new material. For example, the teacher can ask students with ADHD to close their eyes, and limiting the visual channel will allow the student to concentrate on what is being said. But in individual writing assignments, it may be important for the student with ADHD to avoid being distracted by surrounding noise. The student can use noise-cancelling headphones or listen to music (Smith, 2015). Students with ADHD may also be oversensitive, and so to avoid distraction the teacher may need to adjust the room temperature and the intensity of lighting (Kormos & Smith, 2012).

The teacher can use 'signposts', drawing attention to a task, activity, or when instructions are about to be provided. The teacher should first explain to pay more attention by saying, for example:

> "Now, [name], you need to listen carefully because I'm going to explain [how/what] ... It is important because [reason] …"

On the one hand, signposting that is being addressed to the whole class creates a more integrated environment; on the other hand, if the signposting is not directly addressed to students with ADHD, the students may not automatically relate it to themselves.

The design of the classroom should not use extensive use of colours (Smith, 2015), because they may distract the student's attention from the teaching and learning content. Pictures and photos may also create an unnecessary distraction. Plain walls will create a 'calmer' and more focused learning environment, which is beneficial for students with ADHD.

The personal appearance of the teacher may also be important. Extensive use of colours or unusual patterns and fabrics may draw the student's attention. Impulsive and hyperactive students may also not be able to control the urge to touch, which may create awkward situations.

Teaching and learning resources should also not use extensive use of colours or unclear layouts. Colour-coding in teaching and learning resources should be used only for stressing important elements of the content and should be monitored by the teacher.

Traffic lights, as suggested by Babocká (2015) can be used for colour-coded behaviour management. Red means 'no talking allowed', amber 'low level talking allowed', and green 'open talking'. This labelling may, however, be confusing for the student with ADHD, who struggles to interpret the meaning of 'low-level talking'. Students with ADHD may just understand that they can talk, it is paramount that the teacher demonstrates what exactly 'low' means according to social conventions because a student with ADHD cannot simply infer it from the behaviour of other students.

Traffic light signs can be used to give feedback to the student (Rief, 2005). Green may mean 'you are on task' or 'you are doing well'. Amber means 'You need to pay more attention' or 'your behaviour needs improvement'. Red sends the message that 'your behaviour is not acceptable'. The amber sign is particularly important. It serves as a warning and allows the student to self-monitor behaviour and avoid a meltdown.

4. MULTISENSORY STRUCTURED LEARNING

It is widely recommended that teaching an FL to students with SpLDs is based on the Multisensory Structured Learning (MSL) approach (Kormos & Smith, 2012; Nijakowska, 2010; Schneider & Crombie, 2003). Numerous studies have found MSL to be effective in teaching different foreign language skills to individuals with SpLDs, especially dyslexia (e.g., Kałdonek-Crnjaković, 2015, 2019; Nijakowska, 2008; Pfenninger, 2015).

Since the underlying causes of dyslexia and ADHD share similar cognitive aspects (Kormos, 2017), and that the co-occurrence of these two SpLDs is very common (Lipowska, 2011; Pennington et al., 2009), it can be assumed that an approach based on the multisensory stimulation, development of metacognitive awareness and direct teaching can be equally beneficial for students with ADHD.

The employment of MSL when teaching students with ADHD should depend on the presentation of the condition, and its manifestation in FL skills development and task performance in the classroom, as well as the student's age and their cognitive maturity. It should not be applied by default.

The principle of multisensory teaching is the simultaneous employment of all sensory channels – visual, auditory, kinaesthetic, and tactile. In an FL classroom, an example is the use of flashcards to introduce new vocabulary. The teacher shows the card with the word, says the word aloud, and practises the spelling by tracing the letters of the word on the card. Students repeat the word aloud and practise spelling by writing the word on the table with their finger or in the air (Kałdonek-Crnjaković & Fišer, 2017).

Movement and touch are important to help younger students focus on the task and process information more efficiently. Children cannot learn easily from the material that they only see or hear. Examples are touching lips when producing specific sounds, body motion in vocabulary learning, interactive games (Schneider & Crombie, 2003), following the text with the finger when reading. The Total Physical Response method designed by Asher (2009) or the Good Start Method for English by Bogdanowicz and Bogdanowicz (2016) are also examples.

The sense of movement and touch in individuals with ADHD is natural and pervasive. Therefore it should not be curbed. On the other hand, a teacher who wants to manage behaviour should allow the student with ADHD to express movement and use touch only in a way that will not have a detrimental effect on classroom dynamics. This may include, for example, allowing the student with ADHD to walk at the back of the classroom, use a stress ball and a soft fabric, or draw and scribble. In addition, the teacher may ask the student with ADHD to help with classroom tasks, such as giving out and collecting books or erasing the board. These forms of movement and touch will not disturb other students and will help the student with ADHD retain concentration and manage behaviour.

The multisensory approach is also important for revision. Revising is a struggle for students with ADHD who may find it tiresome and boring. Activities that involve

the use of all senses will keep the student with ADHD engaged, and thus more focused.

However, too much movement and touch, especially for those with higher intensity of impulsivity and hyperactivity may be unbeneficial for the student with ADHD. Teachers should constantly monitor the employment of kinaesthetic and tactile modes, for example, by first informing the student what behaviour is encouraged, and what would be unacceptable. For example, in practising pronunciation, students may divide words into syllables, say each syllable aloud, and tap against the desk. The teacher should demonstrate the movement and its intensity, as well as stress that the tap should be done only on the desk.

Alloway et al. (2010) find the strong auditory sense of students with ADHD should be relied on in teaching and learning. For example, a discussion with a student when planning or correcting class activities and written work. Many students, both with learning difficulties and without, find most didactic resources visually distracting (Andrychowicz-Trojanowska, 2016). The focus on the learning material, on the other hand, can be increased by enlarging the text and using a specific font type such as Arial or paper background in pastel colours (Kormos & Smith, 2012).

Considering the explicit approach of MSL, a direct presentation should create a greater focus on specific language aspects. This may include comparative analysis between the student's mother tongue and the target language to show similarities and differences, as well as a synthetic approach in learning new vocabulary (Schneider & Crombie, 2003). The explicit approach will be more effective with older students (Lightbown & Spada, 2006) because it requires metacognitive awareness, which depends on the student's cognitive maturity (Goswami, 2011).

For example, older students can independently correct mistakes in their work based on the teacher's corrective feedback (Lightbown & Spada, 2006). Students with ADHD will likely need little support from the teacher for this task, as their mistakes mainly include letter insertion, substitution, and omission, and stem from inattention (Adi-Japha et al., 2007) rather than from lower phonological awareness, which is the underlying cause of dyslexia.

Sparks et al. (2008) find that a student with ADHD may know spelling rules, but apply them incoherently in free writing. Therefore, corrective feedback for spelling mistakes should first signal the mistake and then refer to the spelling rule. Directing the student's attention to specific spelling and grammatical mistakes will lead to higher metalinguistic awareness, and the higher the metalinguistic awareness,

the higher the possibility that the student will control the application of rules independently in different contexts. For example, if the student writes the word 'because' as 'becos'. The teacher may copy the part of the word that was correct, and leave spaces for the part that was incorrectly written ('bec _ _ s _'). If the student struggles when filling in the missing letters, the teacher can write the correct spelling of the word in the margin of the page, and highlight the part that has been incorrectly spelt.

Metacognitive awareness can be raised through thought-provoking questions and non-verbal gestures, making reference to linguistic knowledge the student has previously acquired (Schneider & Crombie, 2003). The teacher can ask the following thought-provoking questions:

> "Why did you use this tense in this sentence?"
> "What other word could you use in this sentence?"
> "How will you remember this rule?" (Kałdonek-Crnjaković & Fišer, in press).

The structured approach of MSL introduces easier teaching and learning the material, followed by a more complex material that follows from, or refers to, basic forms previously learned (Schneider & Crombie, 2003). This is important in the context of working and short-term memory. Presenting teaching and learning the material in this sequential and logical way will not create an additional burden on working and short-term memory – a burden that individuals with the attention deficit struggle to manage (Kormos, 2017).

This approach should be adopted in teaching all language skills, including vocabulary, spelling, and grammatical structures, as well as to provide instructions and explain activities. For example, if the student struggles to construct a coherent sentence structure, the teacher can provide sentence starters and phrases related to the topic. Improving the quality of the vocabulary, grammar, spelling, and punctuation in sentences already written may be dealt with through corrective feedback.

5. CONCLUSION

Attention is a crucial factor in successful FL acquisition (Robinson, 2003). Students with lower attention will struggle in an FL classroom if it is not adjusted to their needs. Accommodation of the needs of students with lower attention should aim at creating a focused learning environment with a limited number of stimuli.

Students with the hyperactive-impulsive presentation of ADHD need physical movement and interaction with other people, and this may affect behaviour for learning if extensively curbed. Yet, the needs of these students must be balanced against the needs of other students in the classroom, for whom excessive disruption will be detrimental to their progress. In other words, a differentiated approach to accommodate the needs of the student with ADHD should be balanced against the needs of the whole class. If it is not, the student with ADHD may be unjustly prioritised, which may be detrimental to classroom dynamics in the long term.

REFERENCES

Adi-Japha, E., Landau, Y. E., Frenkel, L., Teicher, M., Gross-Tsur, V., & Shalev, R. S. (2007). ADHD and dysgraphia: Underlying mechanisms. *Cortex*, *43*(6), 700–709.

Alloway, T. P. (2015). *Understanding working memory.* London: Sage Publications.

Alloway, T. P., Gathercole, S. E., & Elliot, J. (2010). Examining the link between working memory behaviour and academic attainment in children with ADHD. *Developmental Medicine & Child Neurology*, *52*(7), 632–636.

American Psychiatric Association. (2013). *The diagnostic and statistical manual of mental disorders: DSM–5* (5th ed.).

Andrychowicz-Trojanowska, A. (2016). Perception of textbook material by dyslectic and non-dyslectic students: An eye-tracking experiment. *Linguistica Silesiana*, *37*, 409–427.

Asher, J. (2009). *Learning another language through actions*. Los Gatos: Sky Oak Productions.

Babocká, M. (2015). Teaching English as a foreign language to learners with ADD and ADHD. In S. Pokrivčáková (Ed.), *Teaching foreign languages to learners with special educational needs* (pp. 81–90). Retrieved from http://www.klis.pf.ukf.sk

Baddeley, A. D. (1996). The concept of working memory. In S. E. Gathercole (Ed.), *Models of short-term memory* (pp. 1–28). Erlbaum: Psychology Press.

Barkley, R. A. (2006). *Attention-Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment*. New York: The Guilford Press.

Bogdanowicz, K. M., & Bogdanowicz, M. (2016). 'The Good Start Method for English' or how to support development, prevent and treat risk of dyslexia in

children learning English as a second language. *Polish Psychological Bulletin*, *47*(3), 265–269. https://doi.org/10.1515/ppb-2016-0032

Cain, K., & Bignell, S. (2014). Reading and listening comprehension and their relation to inattention and hyperactivity. *British Journal of Educational Psychology*, *84*(1), 108–124. https://doi.org/10.1111/bjep.12009

DuPaul, G. J., & Weyandt, L. L. (2006). School-based intervention for children with attention deficit hyperactivity disorder: Effects on academic, social, and behavioural functioning. *International Journal of Disability, Development and Education*, *53*(2), 161–176.

Ellis, R. (2014). Principles of instructed second language learning. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (pp. 31–45). National Geographic Learning.

Goswami, U. (2011). Inductive and deductive reasoning. In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development* (2nd ed.) (pp. 399–419). Hoboken, NJ: Wiley & Sons, Inc.

Kałdonek-Crnjaković, A. (2015). Age effect on spelling development in dyslexic Croatian English as a foreign language (EFL) learners. *Govor*, *32*(2), 99–129.

Kałdonek-Crnjaković, A. (2018). The cognitive effects of ADHD on learning an additional language. *Govor*, *35*(2), 215–227. https://doi.org/10.22210/govor.2018.35.12

Kałdonek-Crnjaković, A. (2019). Multisensory structured learning in light of age factor: Vocabulary development in Croatian English as a foreign language learners with dyslexia. *Strani jezici, 48*(3), 129–152. https://doi.org/10.22210/strjez/48-3/2

Kałdonek-Crnjaković, A., & Fišer, Z. (2017). Dyslexia-friendly' approaches in the teaching practice of Croatian English as a foreign language (EFL) teachers. In S. Letica-Krevelj, & R. Geld (Eds.), *UZRT 2016 Empirical studies in applied linguistics* (pp. 139–149). Zagreb: FF Press.

Kałdonek-Crnjaković, A., & Fišer, Z. (in press). *Disleksija na nastavi engleskoga kao stranog jezika [Dyslexian in EFL]*. Zagreb: Alfa Publishing.

Kormos, J. (2000). The role of attention in monitoring second language speech production. *Language Learning*, *50*(2), 343–384. https://doi.org/10.1111/0023-8333.00120

Kormos, J. (2017). *The second language processes of students with specific learning difficulties*. New York: Routledge.

Kormos, J., & Smith, A. M. (2012). *Teaching languages to students with specific learning differences*. Bristol: Multilingual Matters.

Lightbown, P. M., & Spada, N. (2006). *How languages are learned*. Oxford: Oxford University Press.

Lipowska, M. (2011). *Dysleksja i ADHD – współwystępujące zaburzenia rozwoju. Neuropsychologiczna analiza deficytów pamięci [Dyslexia and ADHD – Co-occurrence of developmental disorders. Neuropshychological analysis of memory deficits]*. Warszawa: Wydawnictwo Naukowe Scholar.

Lloyd, S. R., & Berthelot, T. (1992). *Self-empowerment: Getting what you want from life.* Menlo Park, CA: Crisp Publications.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie, & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–468). New York: Academic Press.

Martinussen, R., & Tannock, R. (2006). Working memory impairments in children with Attention-Deficit Hyperactivity Disorder with and without comorbid language learning disorders. *Journal of Clinical and Experimental Neuropsychology*, *28*, 1073–1094. https://doi.org/10.1080/13803390500205700

Morgan-Short, K., Marsden, E., Heil, J., Issa II, B. I., Leow, R. P., Mikhaylova, A., & Szudarski, P. (2018). Multisite replication in second language acquisition research: Attention to form during listening and reading comprehension. *Language Learning, 68*(2), 392–437. http://dx.doi.org/10.1111/lang.12292

Nijakowska, J. (2008). An experiment with direct multisensory instruction in teaching word reading and spelling to Polish dyslexic learners of English. In J. Kormos, & E. Kontra (Eds.), *Language learners with special needs. An international perspective* (pp. 130–157). Bristol: Multilingual Matters.

Nijakowska, J. (2010). *Dyslexia in the foreign language classroom*. Bristol: Multilingual Matters.

Pennington, B. F., McGrath, L. M., Rosenberg, J., Barnard, H., Smith, S. D., Willcutt, E. G., Friend, A., Defries, J. C., & Olson, R. K. (2009). Gene X environment interactions in reading disability and attention-deficit/hyperactivity disorder. *Developmental Psychology*, *45*(1), 77–89. https://doi.org/10.1037/a0014549

Pfenninger, S. E. (2015). MSL in the digital age: Effects and effectiveness of computer-mediated intervention for FL dyslexic learners. *Studies in Second*

Language Learning and Teaching, *5*(18), 109–133. https://doi.org/10.14746/ssllt.2015.5.1.

Pfiffner, L., Barkley, R. A., & DuPaul, G. J. (2006). Treatment of ADHD in school settings. In R. A. Barkley (Ed.), *Attention-Deficit Hyperactivity Disorder: A handbook for diagnosis and treatment* (3rd ed.) (pp. 453–479). New York: Guilford.

Rief, S. F. (2005). *How to reach and teach children with ADD/ADHD: Practical techniques, strategies, and interventions* (2nd ed.). San Francisco, CA: Jossey-Bass.

Robinson, P. (2003). Attention and memory in SLA. In C. Doughty, & M. Long (Eds.), *Handbook of second language acquisition* (pp. 631–678). Oxford: Blackwell.

Schneider, E., & Crombie, M. (2003). *Dyslexia and foreign language learning*. New York: David Fulton Publishers.

Skibska, J. (2013). Dziecko z nadpobudliwością psychoruchową i deficytem uwagi – najważniejsze problemy oraz sposoby postępowania [The child with hyperactivity and attention deficit – The most important issues and approaches]. In E. Ogrodzka-Mazur, U. Szuścik, & J. Oleksy (Eds.), *Edukacja małego dziecka. Konteksty rozwojowe i wychowawcze* [*Education of the small child. Developmental and pedagogical contexts*] (pp. 144–165). Kraków: Wydział Etnologii i Nauk o Edukacji Uniwersytetu Śląskiego, Oficyna Wydawnicza IMPULS.

Smith, A. M. (2015). *Teaching English to students with attention deficit (hyperactivity) disorder*. Retrieved from http://www.des.org.gr/teaching-english-to-students-with-attention-deficit-hyperactivity-disorder/

Sparks, R., Humbach, N., & Javorsky, J. (2008). Individual and longitudinal differences among high- and low-achieving, LD, and ADHD L2 learners. *Learning and Individual Differences*, *18*(1), 29–43.

Sparks, R., Javorsky, J., & Philips, J. (2004). College students classified with Attention-Deficit Hyperactivity Disorder (ADHD) and the foreign language requirements. *Journal of Learning Disabilities*, *37*(2), 169–178.

Sparks, R., Javorsky, J., & Philips, J. (2005). Comparison of the performance of college students classified as ADHD, LD, and LD/ADHD in foreign language courses. *Language Learning*, *55*(1), 151–177.

Tod, J. (1999). *Individual education plans (IEPs): Speech and language*. London, UK: David Fulton Publishers.

Wen, Z., Biedroń, A., & Skehan, P. (2017). Foreign language aptitude theory: Yesterday, today and tomorrow. *Language Teaching*, *50*, 1–31. https://doi.org/10.1017/S0261444816000276

Wu, W. (2014). *Attention*. New York: Routledge.

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Poučavanje stranoga jezika učenicima s ADHD-om

Sažetak

Poučavanje stranih jezika učenicima sa specifičnim teškoćama u učenju predstavlja izazov jer su njihove potrebe za učenjem izrazito individualizirane zato što proizlaze iz složenosti tih teškoća. Učitelji i nastavnici trebaju razmotriti niz pristupa i prilagodbi u učionici kako bi osigurali učinkovito učenje stranih jezika kod učenika s ADHD-om. Disleksija, kao najčešća teškoća u učenju, najzastupljenija je u literaturi. Manje pozornosti pridaje se izazovima koji proizlaze iz poremećaja pozornosti / hiperaktivnosti (ADHD), posebno kada je riječ o razvijanju vještina na stranome jeziku.

Osnovni kognitivni uzrok ADHD-a je slabije radno i kratkotrajno pamćenje (Baddeley, 1996), a očituje se nepažnjom, hiperaktivnošću i impulzivnošću. Simptomi ADHD-a su, između ostalog, neposvećivanje pozornosti detaljima, otežana usmjerenost pozornosti na zadatke i na organiziranje aktivnosti, lako odvlačenje pozornosti nebitnim podražajima, nedostatak samokontrole, nestrpljivost, pretjerano pričanje, često ometanje i prekidanje drugih (American Psychiatric Association, 2013).

ADHD u kontekstu učenja stranoga i drugoga jezika relativno je malo istražen. Pretpostavlja se da slabija radna memorija i izvršni kontrolni procesi utječu na pamćenje i obradu verbalnih i vizualnih informacija (Kormos, 2017) pa time ADHD može utjecati na razvoj jezičnih vještina u stranome i drugome jeziku (Kałdonek-Crnjaković, 2018).

Ovaj rad ukazuje na potencijalne pristupe, uključujući multisenzorni i strukturirani pristup učenju kao i opće prilagodbe redovne nastave, koji se mogu primijeniti u podučavanju stranoga jezika učenicima s ADHD-om, s posebnim naglaskom na engleski kao strani jezik. Ovaj rad također pruža informacije o ADHD-u i njegovom utjecaju na razvoj vještina u stranome jeziku u odnosu na nalaze istraživanja na prvome i drugome / stranome jeziku.

Ključne riječi: ADHD, engleski kao strani jezik, nastava stranoga jezika