Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.8, No.28, 2017

A MODEL TO MANAGE EFL LEARNERS WITH ADHD AND DYSLEXIA

Assoc. Prof. Dr. Sait Akbaşlı
Hacettepe University, Faculty of Education, Ankara, Turkey

Assoc. Prof. Dr. Mehmet Şahin
Necmettin ErbakannUniversity, Ahmet Keleşoğlu Faculty of Education, Konya, Turkey
sahinmehmet033@gmail.com

PhD. St. Merve Gürel
Hacettepe University, Educational Science Institute, Ankara, Turkey

Abstract
In EFL or ESL classrooms there may be those learners labeled as "slow learners" who struggle to concentrate and thus experience failure inevitably. In this study, we deal with dyslexia and inattention (ADHD) because current research suggests behind the slowness of such learners may lie a disorder that can be controlled. We am going to focus on the inattention aspect of ADHD as it is more widely seen among adults rather than the hyperactivity aspect of that disorder (Volkow et al, 2013). Students with inattention and dyslexia show common symptoms and thus may have common problems (Marsha & Camahalan, 2006). The study design aims to help both teachers in class management and learners with learning difficulties cope with the expectations from an EFL learner, especially in terms of vocabulary and reading development. The method that we are suggesting is CALLA method (Chamot & O'Malley, 1996). We will specifically focus on explicit cognitive and metacognitive strategy training elements of this method, which will be executed and assessed through think-aloud protocols. Among these strategies will be vocabulary training through collocations as well as strategies for reading comprehension (See Appendix 2). For vocabulary training strategies, we am going to adopt Lexical Approach (Lewis, 2000) because this approach suggests vocabulary can be better processed and kept in the long term memory when studied through chunks. We think it can be beneficial for learners struggling to learn vocabulary such as those with dyslexia and inattention disorders. The research methodology will be narrative inquiry as suggested by Clandinin & O'Connelly (2000). So, in this model learners are asked to keep a diary throughout their treatment with CALLA method and think- aloud protocols. In the end, this design can help teachers gain some insight into understanding learners with learning difficulty and better their foreign language learning skills.

Key Words: *Reading Skills, Metacognitive Strategies, Think-Aloud Protocols, Lexical Approach, Vocabulary Development, Dyslexia, ADHD, Long-Term Memory*

Introduction

This present research aims to look into difficulties and struggles of L2 learners with reading difficulties (RD) and to suggest solutions to their problems and contribute to SLA (Second Language Acquisition) research. According to Miller (cited in Koda, 1996) there are three elements which are crucial to successful processing of reading material: 1. Visual information processing or decoding, 2. Cognitive processing, 3. Metacognitive processing. The assumption is that cognitive and metacognitive strategies can boost learners with or without RD reading skills. We are going to suggest a model combined with lexical training.

In this study we aim to explore strategic competence, *explicit instruction in learning strategies,* in CALLA method applied in five stages; preparation, presentation, practice, evaluation and expansion. We are going to adapt these five stages to reading tasks to improve reading skills of learners with reading difficulties i.e. dyslexia and ADHD (Attention-Deficit Disorder). According to CALLA model, "explicit instruction in learning strategies that can help students understand and remember both the content and the language" (Chamot & O'Malley, 1996:263). The proposed model is going to be exploratory and qualitative piece of research based on empirical data. The model offers an explicit training in both cognitive and metacognitive strategies through the use of think-aloud protocols. There are numerous benefits of explicit instruction. For example, learners do better in terms of vocabulary acquisition when they are taught explicitly. There is evidence in studies in Second Language Acquisition (SLA) that indicates intentional learning can be more effective than incidental learning (Schmidt, 1993:207).

If learners are made aware of how they learn, then they can control their cognitive processes. There is ample

research in SLA that stresses the importance of conscious processes. Metacognitive strategies help a learner become aware of how they learn. Thus, they learn to regulate their own learning by taking action and taking responsibility for their own learning. Among these strategies is, for example, guessing meaning of unknown words. Research suggests that (Hulstijn, 1992 cited in Schmidt, 1993:209) "inferred word meanings are retained better than meanings given to the reader." Retaining information in the long-term memory is a very important issue in students with reading difficulties. When they fail to do so, they cannot recognize words in a text and thus their semantic processing slows down.

Another important issue in SLA (Second Language Acquisition) research is noticing. Schmidt (1994 cited in Rosamond et al, 1998:146) argues "the term noticing refers to the process of bringing some stimulus into focal attention, that is, registering its simple occurrence, whether voluntarily or involuntarily […] Noticing is the necessary and sufficient condition for the conversion of input to intake for learning, an idea which is referred to as the "Noticing Hypothesis." This hypothesis is quite important especially for learners with difficulties. As it is going to be argued in detail in learner problems and teaching and learning methodology, such learners have difficulty recognizing form (spelling and pronunciation) of words as well as their meaning. This suggests that they are not proficient at "the process of bringing some stimulus into focal attention e.g. noticing the odd spelling of a new vocabulary word", which is the definition of "noticing" (ibid).

In this model we also refer to Schmidt's noticing and attention hypotheses because attention is necessary to encode information to long-term memory and retrieve the relevant information when needed, e.g. decoding meaning of a word from a text. L2 learners with dyslexia and ADHD have difficulties storing which makes it difficult for them to learn vocabulary information and retrieving information from their working memory, items and make them poor readers (Lockiewicz, 2015). In addition, it has been argued that learners with low WM (working memory) capacity are more likely to be affected by stress, which decreases their likelihood to deal with challenging tasks that require strategy use. Thus, WM is of crucial importance to be a skilled reader. By suggesting a model in this study, we would like to explore whether using cognitive and metacognitive strategies can actually help reduce anxiety and increase motivation. "Working memory processes and sifts representations of information in real time, and then feeds some of this information into long-term memory, which stores it" (Rosamond et al, 1998, p. 151). The good news is that working memory is not fixed and can be improved through training. (ibid)

Research done by Lockiewicz (2015) indicates that students with dyslexia cannot retrieve information from their mental lexicon easily, which impedes learning the target language. Also, another research suggests (Sparks & Ganschow, 1993 cited in Lockiewicz, 2015) students who have reading difficulties in L2 may have the same problem for L1 or vice versa because the main problem is "phonological coding".

Learners with reading difficulties also have difficulty with automization and fluency in reading as well as other skills because they are unable to transfer declarative knowledge into procedural knowledge. For this aim, we are going to adopt Lexical Approach suggested by Lewis (2000) and offer collocations training combined with phonology training to the subjects. It is necessary to establish both declarative and procedural knowledge for accuracy and automization (ibid). Research says that dyslexic learners see every problem as new due to their lack of transfer of skills. We argue in the research methodology that teaching metacognitive strategies through think-aloud protocols will help them make links between what they already know and what is new. In this way, they will have improved their working memory capacity. It has been observed by Walter (2004, cited in Lewis, 2000) that students with higher working memory capacity could actually transfer much more easily their L1 abilities to learning L2, which resulted in skilled reading comprehension.

As for the research method, we are going to adopt narrative inquiry method because of its applicability to educational and pedagogical situations. It is suggested that "in understanding ourselves and our students educationally, we need an understanding of people with a narrative of life experiences. Life's narratives are the context for making meaning of school situations (Connelly & Clandinin, 1990:2). "Education and educational studies are a form of experience. For us, narrative is the best way of representing and understanding experience […] Therefore, educational experience should be studied narratively" (Clandinin & Connelly, 2000:17-19).

The aim of this study is to suggest ways to better the learning experience especially the reading process both for colleagues and students. With this model, EFL teachers both in Turkey and hopefully, elsewhere may start noticing reading difficulties in their learners and may take action by modifying their instruction to include CALLA method and think-aloud protocols.

Background and Rationale

Having taught multiple repeaters in an EFL classroom for a few years in a well-known private university in Ankara, we started thinking about what can be done to improve their learning skills. One day, a student of mine (after failing the same level several times) told me she had just learned she had had dyslexia for all these years. Two years ago, we was given a class full of "lost" students who had been repeating the most basic levels for a year. This year we have learned one of them have passed only one level so far since last year (normally they are supposed to pass a level every eight weeks) and another one has just quit school totally. This picture seems pretty depressing, however in this paper we aim to suggest ways based on cognitive information processing theories such as CALLA method (Chamot & O'Malley, 1996) and Lexical Approach (Lewis, 2000) to improve reading skills of college students who are suffering from both dyslexia and inattention, through a comparative and cross-cultural study.

Based on our professional and personal experience we can say that multiple repeaters suffer from learned helplessness and they quit trying after extended periods of failure. Yaylı (2010) did a study with Turkish learners of English (L2) on reading and think-aloud protocols. According to her, other research done on reading strategies revealed that low achievers were not aware of the strategies they were using and thus felt less-confident in reading. We assume this is because they are not aware of the required study skills and learning strategies. Research suggests learners can be taught ways to control and deal with their disorders.

Although there is ample research on early diagnosis of learning disorders, less information is available regarding what can be done with young adult learners. There is not enough data on how to develop fluent reading skills in adults with learning disorders (Huerner, Salmi & Aro, 2012 cited in Vanninen et al. 2013). This is an important issue especially in Turkey, where there are many English-medium universities. For such universities, there is an obligatory one year English program called preparatory school. Regardless of their department, all freshmen have to pass through this intensive English program. As teachers it is our responsibility to provide each learner with quality education so that they can start their departments at the end of a period of one year, ideally. If they cannot finish this program within two years, then they are dismissed. Thus, learners with disorders suffer from high levels of frustration, anxiety and lack of motivation considerably. It is expected that this research is going to be beneficial for students, instructors, program coordinators and administrators in English medium universities, and parents.

The main questions which we would like to find answers to by designing this model are as follows: 1) what are the difficulties encountered by young adult EFL learners with reading difficulties (RD) namely dyslexia and inattention and how do they differ from those without RD?, 2) to what extent can cognitive and metacognitive reading strategies mentioned in CALLA method contribute to reading efficiency of students with RD?, 3) to what extent can cognitive and metacognitive strategies help increasing motivation of young adult EFL learners with RD? 4) to what extent can lexical approach help increasing reading efficiency of young adult EFL learners with and without RD?

The present study follows the following order; problems regarding learning encountered by young adults with dyslexia and ADHD. Then, we explain the theories behind the assumption that learners with these disorders can benefit from CALLA, metacognition and lexical approach along with cognitive processing theories. The next chapter describes the research design, methodology and data collection tools. The final part includes some remarks and explanations on the research design.

Literature Review

a) Learner Problems-Dyslexia- An Overview

According to International Dyslexia Association (2002, http://www.dyslexia.me/), dyslexia is a learning disability caused by the phonological aspect of language. It is a cognitive processing disorder, which means people with this disorder have difficulty encoding information to long-term memory, which impedes vocabulary learning and reading ability. This disorder can manifest itself in the form of inaccuracies in spelling such as adding extra letters or omission, and a general inability in word recognition in alphabetic languages such as English and Turkish. Luria's brain lateralization theory (1982, cited in Vanninen et al, 2013) distinguishes between two different types of dyslexia: L-type (linguistic) and P-type (perceptual). The former is characterized through the evaluation of substantive errors caused by omissions, replacements, and additions. They are classified as real and/or accuracy errors. Whereas, P-type dyslexia is typified by time-consuming errors, which are characterized by hesitations, self-corrections and fragmented words, e.g. disintegrations, repetitions and

corrections. Aside from problems in reading pace and accuracy, dyslexia can manifest itself as inability in understanding oral and/or written input. (Marsha, 2006, p.80) According to the American Psychiatric Association (1994, https://www.psychiatry.org/) it manifests itself as the inability in recognizing words and comprehending a written text, though the individual has no below average intelligence or no physiological impairment such as deafness, blindness, or inadequate schooling. (ibid) In addition to difficulties in reading in L1 and L2, writing and speaking, college students with learning disabilities have less developed study skills and consequently develop high levels of test anxiety, which can affect their performance when they are engaged in tasks both in L1 and L2 (Kerby et al, 2008 cited in Nelson et al, 2015).

According to Liebert & Morris (1967) test anxiety may result from two different components: *emotionality component* eg increased heart rate caused by physiological reactions and *worry component* classified as task-irrelevant thoughts e.g. negative thoughts, probably based on previous performances, about the self. According to Nelson et al (2015, p.423) "because college tasks are heavily language based and therefore require extensive reading, college students with specific reading disability (RD; also referred to as dyslexia) are a group within the larger LD (Learning Difficulty) population who may be at particular risk for test anxiety." As relevant research suggests students with dyslexia encounter problems throughout their academic life, not only in L2. It is also important to note that test anxiety may impede test validity and interfere with accurate test results as the student may not be performing at his/her best (Cizek & Burg, 2006 cited in Nelson et al, 2015). As a result, awareness for dyslexia as a reading disorder must be developed by school administration and teachers. When a five item anxiety scale was applied to college students by Trainin & Swanson (2005), it was found that students with RD (Reading Disability) suffered more from anxiety compared to students without a specific disability.

In another study, Ellis and Rathbone (cited in Duda & Riley, 1990) did research on learning German as L2 (target language) with learners from different nationalities and they numbered each time a student reported any anxiety issues in their diaries. This suggests that learning a second language can also be a demeaning and stress provoking process even for students without any specific learning disorder. Aside from its influence on test results, anxiety can also hinder a student from taking risks and they may show avoidance in the production of language as in writing or speaking. For example, an upper-intermediate learner of English may avoid using reduced relative clauses during a writing test, which is a level objective, lest they should use it wrongly and lose points because of their high level of anxiety. Thus, anxiety can seriously impede a learner's progress hugely.

In addition, learners suffering from high anxiety may avoid careful planning, which is an important subskill at all levels, such as outlining before starting writing because of the anxiety caused by time constraints. As Duda and Riley suggest (1990, p.31) "Process competence also includes the notion of strategic competence." Since dyslexia is cognitive processing disorder (see above), it is inevitable that students with RD have difficulty in recognizing and using strategic skills such as planning. We are going to explain these strategies more in detail within CALLA method (O'Malley & Chamot, 1990) later in this study.

In sum, though students with dyslexia may be poor readers due to lack of appropriate semantic processing abilities, have been recorded not to show any medical pathology in their early development when evaluated on a WISC scale (Berger, 2004, p.189). That is to say, they tend to have average IQ, not pathologically below average. Also, they may have a good understanding of numbers, so they can be quite successful at Maths or in any other field which does not deal with linguistics or words such as visual arts. As SamWe AlWe (cited in Berger, 1984, p.199) suggests dyslexic individuals are capable of logic, but have difficulty in retaining and retrieving information from memory.

He claims they have difficulty in transfer of skills. For example, if a child is suffering from dysortographic dyslexia, they will write "s'appelle" as "spplle", thus failing to transfer what they hear ("^" vowel sound) into written language regardless of whether it is their L1 or L2. They are unable to associate between what is heard (l'auditif) and what is visual (visuel). This type of error would be classified as substantive error that we mentioned above.

According to a case study mentioned by CangelosWe (2016), Mrs. Hinkly teaching 4th graders asks "What was the story about?", a student answers " dusk". Then, she writes a sentence on the board "We saw a bat on top of a pole." and asks "why do you think the writer started the story with this sentence?" Roy, with learning difficulty answers "dusk" and everyone else in the class starts laughing. Roy feels embarrassed because he was still trying to figure out the answer to the first question. The teachers asks Roy to read the sentence on the board and he reads "I was a tab no pot." Everyone laughs again. The teachers ask him to read it more carefully, but this time

he says ", I saw a tab". Roy feels embarrassed and guilty for no reason because he doesn't know that he has learning difficulty. The teacher is not aware of this fact either and she continuously asks him to do the task, causing him to feel even more ashamed. He confuses the words "bat" and "tab" and "saw" and "was". Apparently, being aware of learning difficulties affect classroom management and causes learned helplessness in the student who suffers from it. That is why, it is important to raise awareness towards issues as dyslexia and ADHD. As can be seen above, dyslexia as a disorder is a problem for children as well as adults both for L1 and L2 learning. However, with adequate training their situation can be improved. That is why in this study we aim to raise awareness towards this learning difficulty and advise certain strategies to help such learners.

Another significant learning difficulty that we aim to analyze in this study is attention deficit disorder, which can be linked to dyslexia to a certain extent. ADHD and dyslexia have some common symptoms and features because in both of them the individual suffers from lack of attention and fails at organizing their learning. As Torgesen explains (cited in Marsha, 2006, 1981, p.80), "there may be deficits having to do with perception, memory, and attention." Thus, a learner having difficulty in learning an L2 might be suffering both from dyslexia and ADHD (attention deficit disorder) which may be found together to impede the cognitive processing, in which case it is difficult to diagnose them separately as some symptoms can be similar. That is why we would like to discover these two common problems.

b) Learner Problems-Inattention and Hyperactivity-An Overview

First of all, it should be noted that child and adult ADHD are different because the developmental processes and the required faculties in the brain differ in terms of the tasks that they undertake. For example, a 31-year-old teacher might have difficulty keeping up with the deadlines and have hard time organizing their duties at work, whereas a child with ADHD might be "on the go" all the time and may be reluctant to do their homework (Volkow et al, 2013).

In a survey done among adults between 18 to 44 years of age in the U.S, 5.4% of men and 3.2% of women were diagnosed with ADHD. Among the implications of adult ADHD are low income, unemployment due to constant job changes and social integration problems (ibid). According to the American Psychiatric Association (2012), in order for an individual to be diagnosed with ADHD, they need to have at least 5 symptoms in both inattention and hyperactivity domains (For a full list See Appendix 1). In EFL classes, young adults may also seem restless, talkative but they may also seem very silent and lost. As a learner with ADHD tends to be mobile, active and annoyingly talkative, (See Appendix 1) they can be categorized easily as mischievous, naughty or spoiled by teachers (Marsha & Camahalan, 2006). Thus, it is important to be able to distinguish the underlying reasons behind such behaviors. This argument is supported by the following sentence as well. Marsha & Camahalan argue (2006, p.77) "many students who encounter achievement problems in school frequently warrant the scrutiny of teachers. They are victims of pre-judgment that they can do no better."

One of the biggest problems for learners (both child and adult) can be finding ways to motivate them to start and then to finish a task. For a task which needs to be done silently and individually such as reading, there might be issues with regards to motivation, task engagement and achievement. As it was previously stated in the discussion on learners with dyslexia, learners with ADHD also may not have study skills and may not know the necessary strategies to adopt during a demanding task such as close reading for deducing meaning from context. They can have difficulty planning for their learning e.g. activating schemata before a reading activity and relating new information to their background knowledge. As it is stated by Duda and Riley (1990, p.31) "Language comprehension is seen as a constructivist operation whereby the listener/reader constructs the meaning of the message through an active integration of the message with his background knowledge." Thus, for successful processing, it is necessary to relate old information to new information. Another important issue for learners with ADHD is motivation. As Volkow and Swanson claim (2013:1942) "adults with ADHD have reduced responses to rewards and are less motivated to engage in and follow through on everyday activities. Thus, a motivation deficit might contribute to ADHD symptoms and should be considered in treatment."

Anxiety over task achievement and negative past experiences such as failure might reduce their motivation even more. Comparing one's grades to peers is common among college students and having a lower grade might result in low motivation and development of feelings of frustration (related to increased anxiety), isolation and low self- confidence. "Overt self-comparisons with other learners and personal expectations, emphasis on or concern with tests and grades, a desire to gain the teacher's approval as well as anxiety experienced during the lesson" are in Bailey 's list of characteristics of learners with high anxiety (cited in Ellis & Rathbone, 1983, p.67).

As stated before, students with learning disabilities have reported higher test anxiety when compared to their ordinary peers without a specific disability. Anxiety and motivation are related. According to Krashen's Affective Filter Hypothesis (1982) when learners feel threatened or uneasy in the classroom, their filter is up and when this is the case they cannot learn. When their anxiety level is high, they have difficulty learning. As a result, anxiety affects motivation adversely because it leads to a high filter, which impedes learning. Learners can learn only in a secure and welcoming atmosphere, where they aren't afraid of making mistakes. This is relevant to the previous argument about the avoidance strategy that incompetent learners may adopt. They may avoid using complex structures and thus cannot make progress. So, to avoid this we believe learners need to be motivated to make mistakes. However, this becomes especially difficult with special learners with dyslexia and ADHD, who may already have low self-confidence because of their previous failures in exams, for example.

In addition to all the above problems, based on the previous experience with college students in a private university in Turkey, Ankara students with hyperactivity and inattention problems tend to dominate their peers during classroom activities, especially in speaking. As stated by Volkow & Swanson (2013) among the characteristics of hyperactivity and impulsivity are inability *to wait for his/her turn, talking excessively, interrupting others and blurting out an answer before a question has been completed*, all of which are also problematic for teachers in terms of classroom management. Although medication may reduce these symptoms to a certain extent, we believe teachers can also regulate their teaching methodology to benefit these students with learning difficulties through using CALLA method, which is explained below in detail.

Teaching and Learning Methodology

a) CALLA Method

As mentioned in the abstract and introduction, CALLA (1996, Chamot & O'Malley) is the method that is going to be the suggested model in this study. Developed in 1986, this method is composed of five stages: preparation, presentation, practice and evaluation and expansion. CALLA method is based on the cognitive learning theory suggested by Gagné. The founders of this method argue that learning should be presented in a meaningful context allowing the transfer of skills between declarative and procedural knowledge. Gagné et al (1993, p.262) content that (cited in Chamot & O'Malley) "when the skill is complex, and the rules for learning would be burdensome, teachers can model the skill for students and demonstrate how it is performed." Declarative knowledge can be described as *factual knowledge* which requires coordination between *organizational and pragmatic competence*.(Bachman and Palmer, 1985 cited in Duda and Riley) For example, a learner may be able to name a grammar structure when they encounter it in a text, but may be unable to produce it on their own.

Procedural knowledge, on the other hand refers to unconscious language use in actual contexts (ibid pp.29-30). It is this type of knowledge that metacognition especially helps. Procedural knowledge is about producing the language. Metacognition helps the learner on how to plan, organize and evaluate this production. "CALLA suggests ways in which the teacher can support the mental processes of ELL students through activities in which students reflect on their own learning and learn how to learn more effectively" (Chamot & O'Malley, 1996 p.260). As stated previously, learners especially with learning difficulties have difficulty enabling the transfer of skills between declarative knowledge and procedural knowledge. It is then when CALLA method comes into play, which suggests "explicit instruction in learning strategies that can help students understand and remember both the content and the language" (ibid p263). As learners with difficulty find it difficult to encode, retain and retrieve information from memory, which are required especially in vocabulary and reading among other skills, CALLA can be very helpful for them. " By focusing on important content in academic subjects, language teachers can help students acquire vocabulary and linguistic structures they will need to perform successfully in these subjects" (ibid p.263).

According to CALLA model, in the presentation stage, the teacher aims to activate the background knowledge of students by asking them to retrieve information from their schema. This can be done in various ways, such as asking them to look at pictures *(imagery technique*), title, or any subheadings and getting them to predict the content of the text, then students compare their guesses by skimming the text. Teacher can model this first and she can give the name of the strategy scanning. Another planning strategy could be reading for gist, main idea. Students can skim the text quickly in about 2 minutes to have a general idea about it. Based on the experience it can be said that even ordinary learners are not aware of these strategies, but some of them may actually be doing it unconsciously in real life in L1 e.g. before starting reading closely, scanning the headlines to see if the article is interesting enough. Teachers just need to draw their attention to what they are doing in real life and help them apply it to L2 learning. Pressed by time constraints, students often jump into reading a

text closely without activating prior knowledge and then they may experience difficulty comprehending it deeply. However, with such strategies they can actually gain time because processing and retaining information can be much easier in this way, as research suggests. These strategies can be classified under cognitive strategies, which are linked to metacognitive strategies (See Appendix 2). "Some of the most useful cognitive strategies include elaboration of prior knowledge, in which students actively recall what they already know about the lesson topic" (Chamot & O'Malley, 1996:264).

At the presentation stage, the teacher may give the names of the strategies and help is at its maximum at this stage. Because at this stage, students may need ample guidance to learn how they should learn. The second stage is the practice stage, where students can actually apply the learned strategies. One of the cognitive strategies that can be used is to group main ideas in a text. Here students can learn how to work with the retrieved prior information. The teacher can ask students to draw a semantic web or an idea map using the ideas in the text. This is when they compare their prior knowledge to new information and draw links between the two. It is important to draw this line because sometimes students may not be aware of the fact that they are so much influenced by their prior knowledge that they assume that what they already know must be present in the text and when it comes to multiple choice questions, they may be misguided by their prior knowledge and may go for the wrong answer. Thus, this practice stage helps them how to regulate their own learning. At first, teachers can give feedback to students' way of thinking but later once they learn how to monitor themselves, they can start choosing the right strategy to organize their reading activity and comprehend more thoroughly.

Next stage is the evaluation stage. At first, the teacher can provide students with self- evaluation checklists (See Appendix 4) so that they become aware of which strategies they have used or have not used for a more efficient comprehension and task achievement. Self- evaluation is a metacognitive strategy. Among the metacognitive strategies that can be adopted at this stage are noticing that you have lost attention at some point while reading and then you can go back to the paragraph, or sentence to reread and focus on the words that you know. Here, monitoring and evaluation may be adopted cooperatively and simultaneously.

The last stage is called expansion. This is where the transfer of skills is expected to be achieved. Here, the learner can transfer declarative knowledge to procedural knowledge, or transfer planning for reading into listening or writing skills. They may even apply these strategies to their own lives and their L1. This is especially important for dyslexic learners, who also have difficulty reading in their L1.

Once these strategies are used several times, they will become automatic and the stages will be interacting simultaneously in a very quick way, leading to an increase in the reading processing pace and resulting in a more accurate reading. As stated in learner difficulties, reading pace was a huge issue in learners with dyslexia as well as with ADHD. Thus, we believe slow learners can benefit from these strategies.

According to Miller (1988 cited in Koda, 1996) there are three elements which are crucial to successful processing of the reading material: 1.*visual information processing or decoding 2.cognitive processing 3.and metacognitive processing.* CALLA method help*s* developing all of these faculties. As mentioned previously, learners with dyslexia may also have difficulty associating the sound of a word to its spelling, which means they have difficulty with word recognition. Koda (1996, p.451) argues "word recognition refers to the processes involved in obtaining both phonological codes (or pronunciation) and context appropriate lexical meanings from a visual display of words." By adopting the abovementioned strategies, learners with dyslexia or inattention problems could encode, decode, retain and retrieve information when reading a text more efficiently.

b) Explicit Strategy Training through Metacognition

In this part, we are going to explain the specific teaching methods to improve reading skills of students with dyslexia and inattention. As previously stated in relation to learner problems, students with learning difficulties such as dyslexia and hyperactivity can encounter problems organizing their learning, which can lead to suspended periods of failure. Torgesen (1981) argues "Dyslexic individual appear not to develop metacognitive skills for some tasks, especially those dealing with basic processing (cited in Marsha & Camahalan, 2006:80).

Dyslexic students have trouble identifying demands and selecting the right strategy." Metacognition will help them plan, monitor/regulate and evaluate their own learning, thus hopefully increase their academic success. "Metacognition involves planning for learning; monitoring of comprehension or production while it is taking place, and self-evaluation of learning after the language activity is completed" (O'Malley, Chamot, Stewner-

Mazanares, Russo & Kupper, 1985:560 cited in Carell et al, 1998, p.100). Metacognitive strategies have been proven to be an efficient way to improve students' reading skills by making them more fluent and autonomous; to increase their processing skills and organizing skills, to boost their self-confidence and self-efficacy reducing feelings of isolation and anxiety, which are deemed to be among the problems of students with learning difficulties. Cuchin et al (2006) content that among the benefits of metacognition are increased success, transfer of skills, more efficient learning and developed motivation. It is important to be able to regulate one's own strategy use according to the task undertaken.

As stated previously, students with dyslexia and ADHD have difficulty with transfer of skills. Research says metacognition can help them learn and choose from the required strategy relevant to the demands of the task. For example, if the task asks for deducing meaning of a word from context, the learner must know that by looking for contextual clues such as reading previous sentence to deduce meaning, he/she can accomplish the task. Also, they can check if their guess is right by looking for synonyms of that specific word. They can do all these through metacognitive strategies. However, if they are not aware of any of these, they can easily be frustrated by the difficulty of a task, panic, lose motivation and give up. As stated previously, students especially with ADHD have problems with finding motivation to finish a task. This is may be due to their previous unsuccessful attempts and they may underestimate their potential. However, a successful learner according to the psychologists (Paris & Winograd, 1990; Braten, 2000; Bouffard- Bouchard, 1991a, 1991b; Doly, 1996a, 1996b, cited in Cuchin et al, 2006) knows relevant skills and strategies for learning and accomplishing tasks and can evaluate their performance effectively. Cuchin et al (2006) also mentions how a learner can become autonomous. As stated previously, metacognitive strategies can help a learner become autonomous. Once they are trained, they start thinking about the required strategy and then start applying them on their own during a task. Thus, once they see they can achieve on their own, their motivation and self-confidence can increase respectively.

Another problem mentioned previously pertaining to learner difficulties was avoidance of task complexity to cope with their anxiety. However, if they are trained on how to adopt, regulate metacognitive strategies they may feel free to experiment with language first with the help of the teacher and then on their own. Thus, the gap between what they can do on their own and with help, in Vygotskian terms the Zone of Proximal Development, can be reduced through metacognitive strategies, and they can become more autonomous and self-directed learners. As a result, they will venture into new realms and will not be afraid of making mistakes. They will be able to learn and use more complex language. Also, relevant to the previous argument about affective filter, when they feel less fear to discover new target structures, they won't avoid using complex and new language because they will be able to regulate and evaluate their learning. They will be able to develop new coping strategies instead of giving up.

c) Cognitive Processing Theories: Bottom Up and Top Down

These two processing theories are among the cognitive and metacognitive strategies that learners can be taught to adopt when they are dealing with a reading material. Because learners with low working memory capacity may have a limited repertoire of vocabulary items, they may try depending heavily on their background information/world knowledge, which means they may exploit only one of the faculties, top down, which may result in misinterpretation of the text and thus an unskilled reading experience (Stanovich, West & Feeman, 1981 cited in Faust et al, 2009). Thus, learners need to be taught both of these and they should be in interaction for a successful comprehension.

According to Cisero et al (1997:600) "Development of skilled reading depends on the acquisition of the following processes: phonological awareness, letter identification, word identification, concept (word meaning) activation, and semantic processing." For a learner to understand a text, they need to do word identification within a context using their world knowledge and lexical knowledge so that they can create "a mental representation of a text- level message", which necessitates the "interaction between bottom-up and top-down processes." (Treiman, 2001 cited in Faust et al, 2009:547)

Bottom-up processing refers to word-sound recognition and the comprehension is made at word recognition/decoding level. On the other hand, during top-down processing the learner uses contextual clues and their world knowledge to construct meaning, which is a "global approach." (Perfetti, 1999 cited in Faust et al, 2009) "When word recognition is slowed, contextual factors become more important." (Stanovich, West & Feeman, 1981 cited in Faust et al, 2009).

Although "top-down processes can compensate for deficiencies in bottom-up processes" as suggested by

Stanovich et al (1981), the learner may rely too heavily on prior knowledge, which may interfere with the information available in the text. As mentioned previously, slow and inefficient readers in the case of dyslexia and inattention have working memory and word recognition problems, which suggests they are not skilled at bottom-up processing and may be only relying on their world knowledge when they are trying to construct meaning from a text. For a successful reading experience, two faculties in the brain need to be at: bottom-up and top-down. Impairment in one of them results in inefficient reading. Successive failures can be very demeaning for the learner. "Sustained frustration can make reading anything but rewarding for poor readers, thus diminishing motivation" (Koda, 1996, p.451).

As PerfettWe (1999 cited in Faust et al, 2009:547) suggests "a reader may have trouble with processing printed inputs, know relatively few words or have problems with basic phonological processes which would limit word identification." So, what PerfettWe refers to by "a reader" can be learners with dyslexia who have difficulty encoding lexical knowledge into long-term memory. As a result, the reading pace slows down and comprehension is impaired. In addition, Thornbury (2002) argues "Learners tend to forget 80% of the material taught within 24 hours." This is for ordinary learners and the percentage will inevitably be higher for special learners.

d) Lexical Approach and Collocations Training

In addition to CALLA method and explicit strategy training, we are going to suggest Lexical Approach (Lewis, 2000; Nation,2001; & Anderson, 1999) in this proposed model because it is proven to be efficient for a successful reading experience. Information Processing Theory is a part of Cognitive Strategies like CALLA and Lexical Approach is part of Communicative Language Learning Theory (CLL). Cognitive developmental theory suggests "insufficient prior knowledge, inadequate metacognitive and strategic processing" will inevitably lead to reading failure (Royer and Sinatra, 1994 cited in Cisero et al, 1997). We explain below, how lexical approach can be used to help learners in general and especially slow readers. What can help slow readers become fluent is Lexical Approach as suggested by Lewis (2000).

Wallace (1982) claims words are almost never found in isolation. However, a typical learner tries to study individual words in isolation and thus complain about not being able to remember them. Words that co-occur are called collocations. The relation between them is arbitrary. However, once words are studied in lexical chunks by relating them to prior knowledge through associations, learners will be more fluent and efficient readers because collocation patterns are predictable and complex ideas can be conveyed lexically. It facilitates both receptive and productive skills. It can help both learning declarative knowledge and its transfer to procedural knowledge, which dyslexic learners have difficulty with.

Although there has not been any direct research in L2 that suggests the effectiveness of lexical approach for dyslexic learners, we feel it safe to argue it can benefit such learners because there is research that confirms collocations training contribute to quick and accurate processing of meaning (Conklin & Schitt, 2008; Jiang & Nekrasova, 2007 cited in Yamashita & Jiang, 2010).

Collocation training is a crucial element in Lexical Approach because of its many benefits. Learning words in chunks with their collocates increases fluency, automization and helps retention of vocabulary items from memory. Nation (1990 cited in Bot, 1996, p.530) claims knowing a word includes "meaning, associations, collocations, grammatical patterns in which it can appear, frequency of use, and orthography." Lockiewicz and Jaskulska (2015, p.75) claim "Learning to recognize high-frequency words by sight is critical to developing fluency in reading, as it gives the student a basic context for deciphering other words."

As Hasbun (2005:3) suggests, "knowledge of typical collocations gives learners power. Not only will they avoid making mistakes, but they will also sound more native-like because fluent and appropriate language use requires collocational knowledge." Learners can learn collocations using a dictionary and through concordances available online. Lextutor is one of the most widely used example (Cobb, 1997 cited in Tyne et al, 2014). Learners can learn the high-frequency words and its most occurring collocate through these platforms. Thus, they can give priority to high frequency words and hope to recognize the pattern when they encounter the word in other contexts. Also, categorizing parts of speech together with different word forms and putting them in a semantic map can be one of the solutions to improve dyslexic learners' along with ordinary learners' lexical knowledge. An example of a collocations grid is provided below (Hill cited in Lewis, 2000:51).

Table 1.

Adj+Noun :a Huge Profit
Noun+Noun: a Pocket Calculator
Verb+Adj+Noun: Learn a Foreign Language
Verb+Adverb:Live Dangerously
Adverb+Verb: Half Understand
Adverb+Adj: Completely Soaked
Verb+Preposition+Noun: Speak Through an Interpreter

e) Phonological Knowledge

When we are talking about learning vocabulary, it is of crucial importance to mention phonological awareness as well. The inability of dyslexic learners in reading partly results from lack of phonological knowledge. The ability to read and word-sound recognition go hand in hand (Karmiloff-Smith, 1986 cited in Harley, 2001, p.208). A good spelling skill also results from good phonological awareness (Brown & Ellis, 1994 cited in Harley, 2001, p.211). "A lack of phonological awareness plays an important role in developmental dyslexia. There is some evidence that training in sound categorization might assist reading and spelling development in developmental dyslexia as well as normal reading development training on categorizing words on the basis of the similarity of their sounds" (Harley, 2001, p.215). Thus, it can be argued that along with meaning and form, phonology is crucial for a successful development of skilled reading (Adams, 1990; Bradley and Bryant, 1985; Stanovich, 1986 cited in Hasbun, 2005).

Harley (2001) argues that phonemic knowledge is necessary when learning to read. In literacy of alphabetic languages it is of crucial importance to learn sound-letter recognition. "Teaching the alphabetic principle explicitly does this, and […] training on phonological awareness improves reading skills, presumably by focusing on phonemes and preparing the way to showing how they can be mapped onto letter." (Harley, 2001, p.211) Also, learning about connected speech and phonological phenomena eg elision, catenation, ellipsis, and linking in lexical chunks can help a learner with word recognition. They can match the sound and the symbol when they hear or see a certain lexical chunk more easily. Also, instead of pausing after each word and trying to understand each word separately while reading, they will see them as groups of words and will read more quickly and gain fluency.

When combined with lexical approach, metacognition can boost learning skills. "Metacognition provides learners with ways of estimating the effects of their efforts, and they allow learners to predict the likelihood of being able to remember the material later" (Marsha, 2006, p.78). So, metacognition can be used efficiently in learning lexical chunks, which will in turn help becoming a skilled reader.

Research Design, Methods and Data Collection Tools

As stated previously the suggested research method is narrative inquiry and we suggest to doing exploratory study based on empirical data. Narrative Inquiry is a sub category of Qualitative Research, which entails collecting and studying empirical materials (Denzin and Lincoln, 1994 cited in Clandinin, 2007). Narrative Inquiry differs from positivist research, which is mostly based on justifiable and generalizable findings and their objective interpretation. It is rather analytical and statistical. On the other hand, narrative inquiry values "meanings, multiple voices, distinctions and the particular" (ibid, p.82) Its main focus is on multiple voices and interpretations. Clandinin describes the "elephant in the dark metaphor", which suggests in order to make sense of the object, various people need to come together and tell their own version.

Narrative Inquiry has been used in a wide range of research fields from literary theory, history, anthropology, drama, art, film, theology, law, philosophy, psychology, linguistics, education, and even aspects of evolutionary biological science (Connelly & Clandinin, 1990). Narrative Inquiry may sometimes be referred to as "Stories of Teachers", which delineate "first and second-hand accounts of individual teachers, students, classrooms, and schools written by teachers and others." (ibid pp.2-3) Despite its many benefits, due to its subjective components, i.e. accounts and stories, Narrative Inquiry has also been criticized by structuralist historians and other advocates of positivist research methods. In order for the observations and empirical data to be considered reliable and unbiased, the inquirer needs to pay attention to certain issues while collecting data.

The relationship between the research participants and the researcher is very important and delicate, for example (Clandinin, 2007).

a) Issues to be Considered in Narrative Inquiry Method

The researcher should neither distance themselves totally from the participant nor be too close. They may try to find a medium between the two in order to provide for the generalizability and applicability of the research findings. Other researchers may try to "code narratives collected as field notes or interviews, translate the codes to numbers, and use statistical analysis" (Clandinin, 2007, p.5). To make sure the account of the participant is true, the inquirer can triangulate data from other sources such as accounts of friends, teachers or parents of the participant. They can be asked "What do you make of it for your teaching (or other) situation?" so that the researcher will have the chance to compare his/her own interpretation of empirical data with those of others (Guba & Lincoln, 1989 cited in Connelly & Clandinin, 1990). "Case studies may be read, and lived, vicariously by others"; which is a component that makes a good narrative. (Crites ibid p.8) It is claimed that "narrative truth consists of continuity, closure, aesthetic finality and a sense of conviction." (Spence, 1987 cited in Connelly & Clandinin, 1990:8). It is important to note that "like other qualitative methods, narrative relies on criteria other than validity, reliability, and generalizability" (Connelly & Clandinin, 1990:7).

Narrative Inquirers are cautioned against "the illusion of causality" (Crites, 1986 cited in Connelly & Clandinin, 1990). Crites refers to the 'topsy-turvy hermeneutic principle', "in which a sequence of events looked at backward has the appearance of causal necessity and, looked forward, has the sense of a teleological, intentional pull of the future Events tend to appear deterministically related." (ibid, p.7) Thus, the researcher needs to distinguish between "events as lived and events as told" to avoid this illusion for a true account of the narrative.

Aside from autobiographical writing, interviews, diary keeping, reading strategies questionnaire (See Appendix 3) can be used before the treatment, during and after the treatment to triangulate data obtained from their narrative. Also, at the end of the treatment, the subjects can be given a metaphor and asked to write about it as part of the narrative inquiry.

b) Think-Aloud Protocols

The research method is Narrative Inquiry and the suggested data collection instruments are going to be based on think-aloud protocols. This concept will be used in this research to refer to verbalized thoughts of students while they are engaged in a reading task. There have been a great deal of research done both in L1 and L2 to understand the "mental processes "used by language learners (Aweiss, 1993, p.2). The think-aloud is used to enhance learners' metacognitive strategies. "If students know which strategies to use and when to use them, they can monitor and control their own comprehension processing" (Oster, 2001:64).

Learners take responsibility for their own learning and they can construct meaning more efficiently. Also, it can help with motivation because when learners achieve better comprehension, they can attribute this success to their use of strategy and thus may have increased self-confidence or they may be aware of the problem when comprehension is poor, thus they can change their strategy when it is not working (Oster, 2001). It has been observed that those who verbalize their thoughts can score higher in reading.

The think-aloud can help both teachers and learners. Teachers can identify student strengths and weaknesses and therefore they can organize their instruction accordingly to cater for the needs of learners. Learners can benefit from this protocol by noticing when comprehension is impaired and when there is a misunderstanding due to a lack of background information or lexical knowledge. They can regulate their own learning and thus become better readers. To give an example of a think-aloud model, Leslie Oster (2001) used "A Ribbon for Baldy (1979) by Jesse Stuart for training. Her comments are in brackets and bold; (p.65)

*The day Professor Herbert [**Professor? that must mean this is a college**] started talking about a project for each member of our general science class, I was more excited than I had ever been. [**This is first person narration, the main character in the story is telling it himself. Also, he must like science. Well, it might not be a he, I don't know yet.**] I wanted to have outstanding project. I wanted it to be greater, to be more unusual than those of my classmates. [**He has high hopes! Or, he's ambitious.**] I wanted to do something worthwhile, and something to make them respect me. [**I wonder why he needs their respect**]*

Teachers can train their learners on think-alouds by modeling the behavior in the example above. Based on our experience, we can say that especially poor readers might find this task confusing and challenging and may see this task as time-consuming. So, they may utter only what is already obvious or written in the text. However,

once they get used to using it with more practice and scaffolding, they may start feeling more comfortable with it. Oster (2001) also recounts a similar experience with her class. She is suggesting that teachers should tell learners that each comment is valuable so that they can see the benefits of the think-aloud (p.66). Also, at the first stage during teacher model, it is important to note that there is no right or wrong way of "thinking aloud" so that learners won't feel intimidated to verbalize their thoughts.

Salem Aweiss's (1993) think-aloud protocol training included "a sequence of direct explanations, coaching, and modeling." (p.3) His learners were American students learning Arabic as L2. They did the think-aloud in their L1 and he recorded their voice on an audiocassette. He suggests that such processes prepare readers for reading. One reason why the think-aloud is beneficial for poor readers is that it allows them not to focus too much on the linguistic aspect of the text but on meaning construction. "By focusing their attention on what the text is about, readers will be less dependent on other factors that impact reading comprehension which are purely linguistic in nature, such as syntactical and lexical knowledge" (Carrell, 1984 cited in Aweiss, 1993, p.13).

Another consideration in think-aloud training according to Aweiss (1993) is that learners need to be aware of the discourse markers and connectors so that they can learn to focus on the text as a whole and can make logical connections between sentences and paragraphs. "It is worth noting in this context the need to train and encourage readers to interpret the text at the discourse rather than the sentence level This can be achieved by emphasizing the important role logical connectors and anaphoric references play in arriving at a holistic understanding of the text. (ibid p.13) Finally, in think-aloud training, learners need to be exposed to different text genres so that they can realize the difference features that distinguish a genre from the other and they can recognize these features when they see an example of that genre. Aweiss (1993, p.13) claims "experience with diverse types enhances and polishes students' ability to adjust their processing skills to the text genre with which they are dealing." Having mentioned the usefulness of think-aloud protocols for learners, especially for poor readers, we would like to suggest applying these protocols in classes, where there are learners with learning difficulty. The texts that we suggest using for diagnostic and training purposes are "The Necklace" by Maupassant (See Appendix 5) and "Tell Tale Heart" (See Appendix 6) by Edgar Allan Poe. The reason why we have chosen these texts is because they are from different genres so it will be interesting how learners will process these two texts.

Also, short stories can be considered interesting for university students as they are already exposed to academic texts every day so we thought it would be more interesting for them to read short stories. Also, once they are used to the think-aloud protocol, they will try to transfer the skills to their academic texts at school. Then, they can also reflect on it later. That would be the expansion part of the CALLA method. Another reason why we have chosen these texts is that they are already used in English classes in private high schools in Turkey. They are manageable and compact. The research design for think- aloud protocols look as follows:

Text	Activity	Think-Aloud Protocol
"The Necklace" by Maupassant (Diagnostic)	S reads it at home and writes a summary of the story discussing the plot, characters, development, and theme. S does the SORS survey	S writes on his/her diary each time she feels anxious, notices a decrease in motivation and concentration
"The Necklace" by Maupassant (Training)	T and the S meet. T models the behavior for the first paragraph and thinks-aloud the rest together with the s. T introduces the names of the strategies she has used (skimming, scanning, asking questions about comprehension, about the what is going to happen in the next paragraph, noticing when comprehension is impaired.	S reads the text again at home on his/her own and takes notes on her diary trying to use some of the strategies in planning, monitoring and evaluation stages of CALLA. S also takes notes on his/her thoughts on studying pronunciation and lexical chunks
"Tell Tale Heart" Edgar Allan Poe (Assessment)	S reads the text applying some of the strategies s/he learned. S writes a summary. S groups the words according to its phonemes predetermined by the teacher. S finds the collocations predetermined by the teacher. S fills in the self- checklist at home S does the SORS survey	S takes notes on his/her diary reflecting on the activities s/he was told to do S writes on her diary each time s/he feels anxious, notices a decrease in motivation and concentration T checks s' diary and asks questions forelaboration (interview)

Conclusion

In this piece of study, we propose a research model for teachers and researchers who deal with learner difficulties such as dyslexia and ADHD. The aim here is to develop a model which will help teachers manage

those classes. By applying CALLA method and think aloud protocols described above in their reading and vocabulary classes, teachers can reach out those "slow learners" and can make a difference in their lives. It can be quite frustrating both for the individuals and the teachers when they cannot keep up with class activities. This model includes doing think-aloud protocol activities to help learners verbalize their cognitive processing skills during a reading activity as the dyslexic learner may be struggling silently without realizing. In this way both the teacher and the individual can develop awareness and take action accordingly. In addition, as research shows, lexical approach can improve the transfer of information from short term memory to long term memory, which is one of the problems that slow learners experience.

References

Aweiss, S. (1993) *Cognitive Processes In Foreign Language Reading: Reasoning Operation, Comprehensipon Monitoring, Strategy Use, and Knowledge Sources* al- Arabiyya pp.1-17

Berger, M. (2004) *Les Troubles Du Developpement Cognitif Approche Therapeutique Chez L'enfant et L'adolescent Dunod, Paris*

Carrell, P. L; Gajdusek L. and Wise, T. (1998) *Metacognition and EFLS/ESL Reading.* Kluwer Academic Publishers. Instructional Science Vol. 26 (1/2) 97-112

Carrell, P.L; Akron, P; Becky G, Liberto J.C. (1989) *Metacognitive Strategy Training for ESL Reading* Southern Illinois University. TESOL Quarterly, Vol. 23 (4).

Cangelosi, J.S. (2016) *Classroom Management Strategies Gaining and Maintaining Students' Cooperation* Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic. Ltd. Şti.

Chamot, A.U., and O'Malley, J.M. (1996) *The Cognitive Academic Language Learning Approach (CALLA): A Model for Linguistically Diverse Classrooms*. The Elementary School Journal Vol. 96 (3) 259-273

Cisero, C; Royer, J; Merchant H; Jackson, S. (1997) *Can the Computer-Based Academic Assessment System (CAAS) Be Used to Diagnose Reading Disability in College Students?* Journal of Educational Psychology

Connelly, F.M and Clandinin, D.J. (1990) *Stories of Experience and Narrative Inquiry* Educational Researcher Vol. 19(5) 2-14

Clandinin, D. J. (Ed). (2007) Handbook of Narrative Inquiry: Mapping a Methodology. SAGE Publications, Inc. Thousand Oaks, CA, USA

Cladinin,D.J. and Connelly, F.M.(2000). Narrative Inquiry: Experience and Story in Qualitative Research. San Francisco: Jossey-Bass, Inc. 211 pages

Creswell,JW(2012) *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative research*. Boston: Pearson

Cuchin, S; Gardette, J. & Allaire, B; Quercy, F. (2006) *Apprendre et Comprendre Place et Role de la Metacognition Dans L'aide Specialisée* Mercues Publications

Duda, R & Riley, P (1987) Proceedings of the First European Seminar Learning Styles Presses Universitaires de Nancy

Harley, T (2001) The Psychology of Language *From Data to Theory* Psychology Press Ltd, East Sussex, UK

Hasbun,Leyla (2005) *The Effect of Explicit Vocabulary Teaching On Vocabulary Acquisition and Attitude Towards Reading* Actualidades Inverstigaivas En Educacion

Khosrow, K. and Majid, Y.L. (2013) *Narrative Intervention:A School-Based Counseling Strategy for Students with Attention-Deficit/Hyperactivity Disorder* Hammil Institute on Disabilities

Lockiewicz, M. and Jaskulska, M. (2015) *Mental Lexicon, Working Memory and L2 (English) Vocabulary in Polish Students With and Without Dyslexia* CEPS Journal: Center for Educational Policy Studies 71-89

Lewis, M. (2000) *Teaching Collocation Further Developments in the Lexical Approach* Language Teaching Publications London

Marsha, F. (2006) *Effects of a Metacognitive Reading Program on the Reading Achievement and Metacognitive Strategies of Students With Cases of Dyslexia* Reading Improvement, 43(2) 77-93

Meloy, L., Deville, C., Frisbie, D.A, (2002) *Remedial and Special Education,* Vol.4 ProQuest Education Journals 248

Mitchell, R.M. and Marsden, W.E. (1998) *Second Language Learning Theories* Routledge Taylor & Francis Group NY,USA

Mokhtari, K. and Sheorey, R. (2002) *Measuring ESL Students' Awareness of Reading Strategies.* Journal of Developmental Education, 25(3) 2-10

Faust, M.; Waldman, K.O. (2009) *The Effects of Different Approaches to Reading Instruction on Letter Detection In Normally Achieving and Low Achieving Readers* Springer+Science Business Media

Nelson, J.M; Lindstrom, W.; Foels, P. (2015) *Test Anxiety Among College Students with Specific Reading Disability (Dyslexia): Nonverbal Ability and Working Memory As Predictors* Journal of Learning Disabilities Vol.48(4) 422-432

Oster, L. (1990) *Using The Think-Aloud For Reading Instruction* The Reading Teacher Vol 55(1) 64-69

Parisa, F. (2012) Raising Awareness of Collocations in ESL/EFL Classrooms English Translation Department Journal of Studies in Education Vol.2 (3) Lahijan, Iran

Vanninen, P. and Maatta, K. (2013) *Secondary Education Students with Reading Disability. Findings from Two Remedial Training Experiment* Studies for the Learning Society Vol.3 (1/2)

Volkow, N.D.; Swanson, J.M. (2013) *Adult Attention Deficit Hyperactivity Disorder* The New England Journal of Medicine Vol 369 (20) 1935-1944

Wallace,Michael (1982) Practical Language Teaching Vocabulary Oxford University Press

Yamashita, J. & Jiang, N. (2010) *L1 Influence on the Acquisition of L2 Collocations: Japanese ESL Users and EFL Learners Acquiring English Collocations* TESOL Quarterly Vol. 44(4) 647-668

Yaylı, D. (2010) *A Think-Aloud Study: Cognitive and Metacognitive Reading Strategies of ELT Department Students* Eurasian Journal of Educational Research, Issue 38, Winter 2010 234-251.