Language Learning Strategies for University Students with Attention Deficit Disorder (ADD)

Estrategias para el aprendizaje de lenguas en universitarios con trastorno de déficit de atención (TDA)

Estratégias para a aprendizagem de línguas em estudantes universitários com transtorno de déficit de atenção (TDA)

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ABSTRACT. This paper highlights the importance of language learning strategies (LLS) as support methods related to inclusive education (IE) processes, and tries to find specific language teaching strategies for students with attention deficit disorder (ADD) in order to achieve a meaningful and functional learning. After analyzing the LLS and taking into account the difficulties learners with ADD face when learning foreign languages, we reach the conclusion that the most appropriate are the compensation and affective or socioaffective strategies, since these specific education strategies enhance their skills performance, make them part of the teaching-learning process and prepare them to make their own interventions, eliminating the stress of a regular day-to-day class, catching their attention and increasing their motivation.

RESUMEN. El presente artículo resalta la importancia de las estrategias de aprendizaje de lenguas (EAL) como métodos de apoyo relacionados con los procesos de educación inclusiva (EI), así como buscar las específicas para la enseñanza de idiomas en alumnos con trastorno por déficit de atención (TDA) con el fin de obtener un aprendizaje significativo y funcional. Después de analizar las EAL y atendiendo a las dificultades a las que se enfrentan los aprendices con TDA en el aprendizaje...
The objective of this work has pedagogical implications since it poses efficient answers to the challenges arising from the condition of disability and those faced by Higher Education (HE). The ultimate aim of language learning is the acquisition of the communication competence, and this objective is attained through the suitable choice of activities by the professor and the appropriate use of the Language Learning Strategies by the student. Every LLS is important but, in light of the difficulties faced by learners with ADD, we are going to analyze and propose those support strategies in language teaching that have the potential for enhancing the learning process of students with attention-deficit disorder (without hyperactivity), i.e., those who exhibit concentration problems or are easily distracted. There are three subtypes of symptoms that characterize the disorder, and for this work, we are going to consider the students with ADD because they have greater difficulties in the concentration and attention processes (Tovar Bordón, 2011). We intend for students with ADD to learn languages feeling part of the teaching-learning process and to prepare them for their own interventions, eliminating the stress of a normal class, catching their attention and increasing their motivation. This guiding allows students to leverage the advantages of the instruction to develop their competence in the foreign language (L2).
DIVERSITY IN THE EHEA

Next, we will present our reflections within the theoretical framework, and we will delimit, first, the implications posed by the inclusion of diversity management in the professor’s competence profile, with the European Higher Education Area (EHEA) as a context reference. The EHEA is a significant challenge for university faculty, especially in aspects such as attention to diversity of the student body, since it proposes a new educational paradigm that entails substantial changes in the responsibilities of professors, who must adapt their professional profile to the demands of this new social and educational scenario. Within the framework of the professor’s professional competences, the new approach establishes as a benchmark considering the need to pay attention to diversity (Mas & Olmos, 2012). The concept of diversity sends us to the fact that all students have common educational needs, shared by the majority; some are their own or individual needs, and within those, some may be special (Duk, 2000).

Inclusive Education (IE) has also reached university institutions, given the advancement of global practices within Higher Education (Moriña, 2017). However, this movement of the university towards a global adjustment requires design policies, strategies, processes, and actions that will contribute to a definite success of all students. Inclusive Education includes attendance, participation, and performance of all students (Mendía, 2012), so attaining inclusion is closely tied to equality as a response to the diversity of the university student body in the classrooms (Fernández Batanero, 2011). The result of inclusive reforms, policies and legislation that promote equal opportunities at the academic and work environment has caused the number of disabled students to rise during the last years at the universities (Rivera & Irizarry, 2013). Diversity is no longer an exclusive requirement of the earliest stages of education, but of any educational stage and, therefore, emphasizes IE which intends to tend to diversity and poses the challenge for the faculty of a competence profile tilted toward giving attention to every type of student (Mas & Olmos, 2012).

LEARNERS WITH ATTENTION-DEFICIT DISORDER (ADD) IN HIGHER EDUCATION

It was thought that only children could suffer from ADD, but there is scientific evidence now that as much as two-thirds of children with ADD will continue suffering from it when they are grown, i.e., between 4% and 5% of all adults (Barkley, 2013). Many of them make it to the university, but this does not mean that they have overcome the entire set of communication problems (Fernández Batanero, 2011). To this circumstance, we need to add that adolescents suffer drastic changes, as expressed in the leap from schoolboy to young college student who has not reached the required maturity and, on the other hand, brings a baggage of specific and varied forms and styles of learning. In general, the situation faced by new learners is that when accessing higher education, they are demanded a change in their identity; this scenario is heightened even more in those students with ADD problems. While it is true that these students do not differ from the rest of their peers in intellectual capacity, up to a 30% of them has learning alterations (Rodríguez-Salinas, Navas, González, Fominaya, & Duelo, 2006), and depend to a greater extent on external motivations to meet a goal (Luman, Oosterlaan, & Sergeant, 2005).
Sometimes, we university professors do not feel equipped to face diversity and to foster the development of inclusive practices. We, professors, think overall that the students with ADD hold back learning of the rest of the class; we also tend to put labels, such as: “he is not smart,” “she is not suitable or apt for,” etc.; in other words, we can be susceptible to stereotypes, which in turn causes us to build a wall hindering the students’ success (Kurth & Mellard, 2006). These labels we create unconsciously (and consciously) lead us to being unable to motivate our students who have some kind of deficiency or to find alternatives for them. Phrases like the following have been something common during many years in education: “some have aptitudes for studying” is just an excuse of some professionals for not going further in their work or accepting failure (Tovar Bordón, 2011). Often times, we do not know how to deal with students with ADD and choose to reprimand them or even ignore them. In the case of these examples at no time is the student receiving any support, on the contrary, a greater damage could be caused, such as low self-esteem and lack of motivation, poor performance, and dropping out, among others. On average, students with ADD have academic problems although they are properly qualified (Rodríguez-Salinas et al., 2006).

INCLUSIVE EDUCATION (IE): QUALITY AND EQUITY

Inclusive Education is a process that entails the idea of participation and learning in equality, fighting against any act of segregation or discrimination (Barrio de la Puente, 2009; Fernández Batanero, 2011; Muntaner, Rosselló, & de la Iglesia, 2016; Parra Dussan, 2010). IE is a global change in the education system that affects the entire student body and implies reformulation of the teaching practice through the implementation of teaching strategies to facilitate the development of abilities in all the students (Zappalá, Köppel, & Suchodolski, 2011), with particular attention to those more vulnerable (Sandoval et al., 2002). Many universities have not yet developed a strategic plan in the IE process; perhaps that is one of the reasons why the professor has not been able to handle this situation either. Only a few professors are conscious that many students with ADD require adapted pedagogical practices that are different and specific for them (Parra Vallejo, Pasuy Oliva, & Flórez Villota, 2012).

Precisely quality and equity are crucial to guarantee IE, and they are not based on aid-oriented, compensatory or focused approaches, but have a preventive character (Muntaner et al., 2016). The inclusion process does not attempt to benefit the people with disabilities; on the contrary, the construction of those values is heightened interactively with the entire student body and faculty (Ramos & Huete, 2016). Functional diversity shall not become, for example, a lack exigency for the professional to be; it is important to make sure that the educational processes of Higher Education are consistent and meet the quality requirements and standards; this can only be expected if the students receive support and resources for their correct performance and compliance. Higher Education programs must guarantee equity and also quality to allow for a guarantee of minimum competences of the professionals qualified to practice a certain career. This assumes that, in the inclusion processes, the assessment of the academic performance must be equally demanding for all students in the process of formation at a higher education level, because social responsibility establishes that the future professional fulfills all the basic requirements and competences to be able to achieve academic and work success (Martín-Padilla, Sarmiento & Coy, 2013). Ultimately,
acknowledging that the education systems need suitable instruments to adapt to the support needs of disabled students so that they obtain the highest results possible, does not have to imply the existence of segregation (Ramos & Huete, 2016).

THE ROLE OF THE PROFESSOR IN INCLUSIVE EDUCATION (IE)
Inclusive Education does not only affect the students, but also the faculty and the rest of members of the education community (Sandoval et al., 2002). The professors must be prepared for the challenge posed by the inclusion of students, in our case, with ADD. It is true that no policy has been implemented aimed at reconciling faculty with this situation and train them in this new paradigm to confront this challenge with skills that promote advancement in theses students’ learning.

The EHEA proposes a shift in paradigm from the education based on knowledge towards competency-based learning (Fernández Batanero, 2011). Within this new context, the professor becomes the impeller of learning of the competences and aptitudes that the students must acquire and cease to be a simple transmitter of knowledge: the education centered in teaching and the professor as a transmitter of knowledge becomes an education focused on learning and on the student as the main character. The role of the professor is basically reduced to facilitating the resources needed and acting as a guide for the learner. All these changes will require efforts on the part of the university institution and, especially, on the part of the professor, where the latter becomes one of the central agents (Fernandez Batanero, 2011). This new approach, focused on learning and the student, is what establishes the need to tend to diversity as a referent to be considered as a piece of the professor’s professional competences (Mas & Olmos, 2012). In Inclusive Education, the professor becomes a generator, motivator, and driver of learning and support. Their function consists of enabling the students so that they can make decisions regarding their own learning (Barrio de la Puente, 2009). Faced with this situation, we professors have the obligation to modify our teaching methods geared toward students, in our case, with ADD. It is necessary to establish lines of performance to work in the classroom, by designing, for example, specific language learning strategies (LLS) that can help students not feel excluded, but rather contribute as a member of a learning community. Within the university classroom setting, for disabled students to be successful, the faculty’s training must be included, together with their positive attitude and good disposition to provide curricular adaptations (Leyser, Greenberger, Sharoni, & Vogel, 2011). This will lead us to the use of new teaching methods, with lessons that are more dynamic, and an increase in the interaction on the students’ part (Fernández Batanero, 2011). The development and strengthening of strategies geared toward disabled students play a crucial role in their academic advancement (Rivera & Irizarry, 2013); while tutoring in their learning process will grant them more autonomy and a better education (Mas & Olmos, 2012).

LEARNING OF FOREIGN LANGUAGES (L2)
The Common European Framework of Reference for Languages (CEFR) (Ministry of Education, Culture, and Sports, 2002) provides general recommendations for the teaching of languages with an approach that focuses on action, in which the students will need to prove a series of capabilities. The CEFR defines
the strategy as “any line of organized, intentional, and regulated action, chosen by any individual to perform a task which he or she has decided to do or which he or she has to face” (2002, p. 10). To perform these tasks and advance learning, the student needs to use certain strategies that are dependent on their skills, their circumstances, and context, so that when faced with the same task, each person can use different strategies (Ministry of Education, Culture, and Sports, 2002).

L2 professors can think that learners with ADD do not master the language when the reasons behind are actually the difficulties in learning and paying attention. The fact of learning a new language requires effort, and it is anticipated that most of the students will have difficulties with certain concepts at a given time, so any setbacks are considered normal when beginning to learn a foreign language. However, when those learning and attention difficulties persist, we must take them into account. For inexperienced professors, it is sometimes difficult to detect students with ADD in the classroom, and that can be misleading, since their behavior can vary: they can ask and interrupt a lot, or, on the contrary, they look lost, with lack of interest and incapable of focusing (Tovar Bordón, 2011). Therefore, the professor must, in the first place, detect the learners that could be suffering from ADD, considering that most of the times their difficulties are based on being able to concentrate, pay attention, organize themselves, plan, solve problems, and control their emotions (Barkley, 2013).

In the case of an L2 course, in general, it is much more difficult for the professors to ensure that students do not get distracted, given that they do not understand the language, in a class with students with ADD one must try to change the methodology so as to integrate and to motivate these students to make them feel they are part of the class and not a problem. The motivation understood as an answer to the need to get the students involved during the teaching-learning process, in which the professor assumes the responsibility of creating strategies to get them affectively involved in their education (Galván, 2008). The fact that these students exhibit a low motivation toward learning and a low self-esteem makes it imperative to generate a pertinent quality education starting off with the needs expressed by the students (Parra Vallejo et al., 2012). For this reason, the methodology that we need to take to the classroom when teaching the L2 in students with ADD is based mainly on reducing anxiety and stress in anticipation of a possible failure. For the inclusion of students with ADD, we propose activities for the learning of L2 that include the strategies that seek adequate development of the course effectively.

**LANGUAGE LEARNING STRATEGIES (LLS)**
The CEFR indicates that “progress in the teaching of languages is clearly visible in the ability of the student to perform observable language activities and put communication strategies into practice” (Ministry of Education, Culture, and Sports, 2002, p. 61). Consequently, it is not enough for learners to comprehend an amount of data: vocabulary, rules, functions, etc.; it is crucial, additionally, that they learn how to use that information to negotiate meaning. Communication becomes the most important objective of the learning of L2 (Hiep, 2007; Marcos García, 2015). This importance attributed to the communication and intercultural competences by the CEFR has given rise to an impact in the curricular reforms within the convergence process (Edwards & Lopez Santiago, 2008), giving us a glimpse of a
very different picture from the one that emerges from the traditional model of university teachings. Currently, the design of teaching programs at the university level of the L2 must be centered in the key abilities to develop the communication competences (Ezeiza, 2009). Thus, if the ultimate aim of language learning is the acquisition of the communication competence, the importance of the right choice of activities by the professor is crucial, as well as the appropriate use of the LLS by the student.

The LLS can be understood as a combination of learning activities directed toward a goal that the learners use to improve their learning (Rachal, Daigle, & Rachal, 2007). The professors as facilitators of learning (Luna-Hernández, 2016) we must know which are the strategies that can be more useful to our students as a functional part of a professional future, as well as identifying what strategies are more appropriate according to the students’ needs (Rubin, 1987).

IE is based on valuing diversity and on the development of strategies to enrich the teaching and learning processes, with which exclusion and inequality are diminished (Serrato & Cedillo, 2014). The professor must identify and develop specific strategies to favor inclusion of the students with ADD, fostering actions that allow for a greater autonomy and better learning. The university professor must be able to offer learning opportunities, both for individuals and groups, foster individual and group differences based on each individual or group (Mas & Olmos). Language Learning Strategies encompass a series of resources and procedures that intend to guarantee a suitable processing of new knowledge considering the specific requirements of each learning situation (Martínez Agudo, 2002), but IE implies an open and flexible teaching style that allows to personalize learning experiences and promotes the greatest degree possible of interaction and participation of the entire student body.

With the adapted LLS practices, it could be possible for all students, regardless of their innate or acquired individual abilities, to have the same learning opportunities, thus contributing to positive results. We, professors, are required to provide significant learning strategies for all and to select the appropriate LLS for each student, in this case, for the students with ADD. Supporting people with special needs would allow developing an inclusion process that would maintain the stringency levels for the preparation of competent and suitable professionals.

The LLS consist of any strategy that the learners use to acquire a language (Sandoval Zúñiga, 2015); more precisely, Oxford (1990) considers that they are specific actions or techniques that the students use, often intentionally, to improve their skills in the mastery of language. Concerning the categorization, there are different taxonomies available; however, in this work, we will follow the conceptualization developed by Oxford (1990), since it is one of the most reliable LLS classifications accepted by theoreticians (Barrios, 2015; Chuin & Kaur, 2015; Ellis, 1994; Judge, 2012; Sung, 2011). This author divides the strategies into two main categories: direct and indirect. Direct strategies contribute directly to language learning, and all of them require a mental processing, whereas indirect strategies provide indirect support to learning. These two categories are subdivided into six groups. Table 1 below presents this classification:
Table 1
Classification of Learning Strategies (LS)

<table>
<thead>
<tr>
<th>Direct Strategies</th>
<th>Indirect Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) <strong>Memory strategies</strong>: these strategies specialize in the remembrance or evocation of what was learned in the language, serve to remember and recover information.</td>
<td>4) <strong>Metacognitive strategies</strong>: these strategies imply a reflection on the learning process; they coordinate learning to evaluate progress.</td>
</tr>
<tr>
<td>2) <strong>Cognitive strategies</strong>: they are intellectual actions implemented essentially to reflect on one’s own learning, by implying, reasoning, analyzing, and synthesizing what was learned, understand and produce the language.</td>
<td>5) <strong>Affective strategies</strong>: these strategies help the student to regulate emotions; they are intended toward reducing anxiety.</td>
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<td>3) <strong>Compensatory strategies</strong>: use of the language in spite of the lack of knowledge, such as guessing meanings according to context or the use of synonyms and gestures to transmit knowledge.</td>
<td>6) <strong>Social strategies</strong>: they allow to see the role played by the interaction with others; learning with others through the formulation of questions, interaction with native speakers, and interest for the country’s culture.</td>
</tr>
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**SPECIFIC STRATEGIES FOR STUDENTS WITH ADD**

Conscious of the importance of the communicative competence in the learning of L2, it is necessary to apply the LLSs that are useful to students for exercising communication effectively, overcoming difficulties arising from their attention deficit and their limited mastery of the target language. Avoidance and compensation are part of the strategies used by learners. This first type of strategies lead to impoverishment of communication, since the speaker, with the purpose of avoiding problems in the use of the language or preventing any mistakes, gives up on approach certain topics; her or she abandons a subject, totally or in part, or reduces the contents of their message (see Betoret & Artiga, 2011). The second set of strategies comprise the search for alternative procedures that would allow the speaker to achieve their communicative intention: paraphrasing, explain by means of examples, using an invented term that he or she deems understandable for the receiver, etc. From the point of view of didactic applications, the most important strategies are those of compensation. Many of them are common to the communication processes between competent natives: resorting to extralinguistic hints, using contextual data, asking clarification from the interlocutor, etc., to make sure the correct understanding of messages.

Considering the difficulties faced by learners with ADD, the compensation strategies would help them make a suitable use of was learned, in spite of the limitations they may have in the knowledge of the L2 and the voids in their learning. These strategies allow the learner to maintain the communication instead of abandoning it as a result of unforeseen difficulties, thus providing them with a greater contact with the L2 and more opportunities to practice and learn. Compensation strategies include making use...
of actions like assumptions or guessing of meaning of what is being communicated in the L2 by means of the use of hints or clues, anticipation of contents and meanings based on the context, the use of the mimics and gestures, the search for aids and alternative forms to express the ideas, and the use of synonymous (Oxford, 1990; Roncel Vega, 2005). In sum, compensation strategies allow them to use the L2 even if they lack some knowledge.

Additional significant LLSs for learners with ADD are the affective strategies that help the student identify and control their feelings, motivations, interests, and emotions effectively. The subjects that use affective strategies are able to control their emotions destined to reduce anxiety and to control them during language learning process (Psaltou-Joycey, 2008). Control of anxiety is an important factor since we understand that this control favors learning, mainly in oral communication, because it allows students to venture themselves into speaking, disinhibit themselves, and not grant importance to the mistakes they make (García Herrero, 2012). The continuous practice of these strategies leads students with attention deficit problems to show a good predisposition at the time of learning the L2. The students who use the affective strategies are better enabled to work alone outside the class setting (Rubin, 1987), which leads them to reinforce the autonomy in the development of its learning.

There are other authors who also recognize the importance of the denominated socio-affective strategies, that imply control of the emotions and self-strengthening through cooperation, that is to say, the interaction with another person, the intention to favor the learning and the control of the affective dimension that accompanies the learning (Marcos García, 2015). Examples of partner-affective strategies could be the taking of steps to surpass inhibitions, to cooperate with other learners or native speakers to use the language, to make ask repeating or paraphrasing, among others (Chamot, O’Malley, Küpper & Impink-Hernandez, 1987).

**SPECIFIC LLS FOR STUDENTS WITH ADD**

The ultimate aim of language learning is the acquisition of the communicative competence, and this is attained through the suitable choice of activities by the professor and the appropriate use of the LLSs by the student. All LLSs are important, and they should all be used by supporting each other. In turn, the faculty should be committed to helping their students by selecting the strategies that better adapt to their characteristics geared toward optimizing results to make them significant and of a good quality (Alonso Tapia & Cartula Fita, 2003).

The reasons why we have decided on the compensation or affective or socio-affective LLSs are based on the fact that these specific teaching strategies heighten the skill performance of students with ADD in different aspects:

- They promote cooperative learning with the active participation of all the students in the education and learning process, highlighting their roles and favoring interaction in group work. One of the difficulties that students with ADD have to face is getting to integrate with the group (Du Paul et al., 2004). Frequently, they are linked to social interaction problems, which entail difficulties in the relationship with their class peers, disapproval from the group, and finally low self-esteem. The LLSs chosen especially for them force them to develop strategies that
favor their own inclusion since they are forced to interact with other students when working in groups.

• The use of these strategies allows them to be highly motivated and seek integration, so they look for opportunities to establish relationships and be in contact with the foreign language and, although they are scared to make mistakes, they continue trying (García Herrero, 2012).

• Implementation of this type of strategies will help students improve their learning, which will be reflected in their grades; at the same time, it will raise their self-esteem by highlighting their talents and helping them to compensate their deficiencies, ultimately motivating them to continue improving themselves every day (Tovar Bordón, 2011).

• The use of these specific LLSs in learners with ADD provides an autonomy to them in the learning of the language.

• These LLSs contribute to the development of the required oral skill as a functional part of their professional future, since the student is able to understand the importance of the study of that foreign language, closely linked to oral communication (Luna-Hernández, 2016).

• The selected LLSs reinforce their effort, which will help them not to grant so much relevance to the mistakes and more attention to the time used to improve, which will prevent a sense of defenselessness help them believe more in how they control their actions (Tovar Bordón, 2011).

Supporting people with special needs provides them with an inclusion process where the levels of exigency for the training of competent and suitable professionals is maintained, as well as the development of personal aspects, such as self-learning and the remaining linguistic skills included in the language teaching-learning process (Luna-Hernández, 2016).

CONCLUSIONS

The LLSs that we propose for students with ADD at the higher education level are those of compensation and affective or socio–affective, because they are the strategies that specifically heighten the skill performance in students with ADD. In the field of languages, there are many paths that can lead to a good learning of such, and the professors must help the learners to find the way and select the best-suited strategies that can foster significant learning. The fact of having learners with ADD in the classroom, forces us to commit ourselves to helping them by selecting the most appropriate strategies for their characteristics aimed at optimizing results, so that these are significant and of quality. Therefore, the suggestions posed in this work can be very useful for the foreign language professors at the university setting that have to cater to students with ADD. Our proposal is not an attempt to modify the educational plan, but to present the pedagogical suggestions corresponding to the conclusions reached in order to improve the learning result, offering the LLSs that are more suitable for the acquisition of the L2 inn students with ADD that could contribute to a safe learning that will get them academic success. Although in many occasions the transformations that must be carried out at the university are complex and deep, in others, the changes are easier to make, as concluded in this article. An improvement proposal related to the faculty would be for them to exhibit a positive attitude towards disability and the needs stemming from it (Moriña, Cortés, & Molina, 2016).
For future works, it would be appropriate to conduct a study of the LLSs used by the students with ADD themselves through a questionnaire in order to obtain a greater empirical evidence of validity on the autonomy of these foreign language students in a higher education setting. The results could contribute relevant information to diagnose and optimize the quality of the academic performance of students with ADD and be able to determine, if necessary, the support and optimization requirements of the students’ learning situations.

REFERENCES


